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Government of India,
Ministry of Home Affairs
Public Section

Pros. / Serial	Nos.

Notes & Correspondence

Subject.

Indian National Flag — Standardization of — Correspondence with Indian Standards Institution.

Previous References.	Later References
7- 87/47 Public (B)	7- 41/6/57 Public 25/29/56 pub I 15/9/62 Pub.II

1

7- 41/3/49-Public

S. 97 (Cloth-lined Unbleached).
P. 18/46/48—F.J. (A.C.P.) 6862/M—1281—7-3-47—58,000

Ministry of Home Affairs.
Public.

Serial No.1 p-1/c

I have discussed with D.S.(J) who wanted me to verify the bonafides of the Institute. I explained to him that it is a statutory body. He directed that I should represent. Issue letter below and resubmit.

Sd. AV.Raman.
18.12.48.

Serial No. 2 Issue. p-3/c

Serial No. 3 p-4/c

I have replied. Add to papers.

Sd. A.V. Raman.
18.12.48.

Serial Nos. 4-6 Receipts. pp 6-30/c

Serial No. 7. p-31/c

Please keep this on the National Flag file regarding the Indian Standard Institution.

Sd. A.V. Raman.
5.2.49.

Serial No. 8 Issue. p-32/c

Serial Nos. 9-10. Receipts. pp 33-38/c

Serial No. 11. Issue. p-39/c

Submitted with reference to S.Nos. 9-10 vide U.S.(Pb)'s footnote dated 28.3.49 on S.No.11.

1.4.49.

N.M
1/4
US(Pb)

Issue d.o. below to Mr Halkatti.

AV Raman
5.5.49

S. NO. 12 Issue p-40/c

(3)

Serial No.13.

We may await further development in the matter.

RDS
12.5.49.

A V Raman
14.5.49

N.M
14/5
~~US(Ph)~~

p. 41/Cor.

RDS
14/5

[No reply has been received from Shri. C. P. Halbhavi Asstt. Dir. of Indian Standard Institution. A D.O. [illegible] letter is put up.

A V Raman
15.6.49

SWS.
15.6.49

SS
15/6

N.M
15/6
~~US(Ph)~~

S. No. 14 Issue p. 42/c

Serial No.15

File please.

Sd. A.V. Raman.
21.6.49.

p. 43/Cor.

Herewith please.

RDS
24.6.49.

N.M
24/6
~~US(Ph)~~

D.S (F) may also see for infn.

2. Serial (1) will be relevant. The Indian Standards Institution set up a Committee at the instance of the Army HQrs. to prepare a specification for the National Flag of India, e.g. colours, sizes, proportions and dimensions etc. Our Ministry was asked to be represented on the Cte. and we had a meeting on 28.1.49; it is now proposed to finalise the specification. A copy of the finalized draft will be put up for approval to Govt in due course after which it will have been standardised. Technical experts are on the Committee.

A V Raman
25.6.49

RDS
20/6

D.S (F).

Issued
27.6.49

S. NO. 16-17 pp44-59/c (4)

I mentioned to D.S.(F) about postponement of meeting.

A V Raman
16-7-49

~~I attended the meeting of [illegible] re:~~
~~National Flag which was held in my room~~

I attended the meeting of the Indian Standards Institution regarding standardization of the National Flag held in my room on 21-7-49. Prior to the meeting, I received a telephone message from the Principal Private Secretary to the Hon'ble the Prime Minister drawing my attention to the press report dated the 18th July 1949 where it was mentioned that the Indian Standards Institution have drafted a formula suggesting a uniform method for the production of the flag with the help of some particular chemicals etc. vide cutting underneath from the Times of India dated the 19th July 1949. I was directed to tell the Committee that it should bear in mind while finalizing the specifications that the National Flag should be of stuff which is hand spun and hand woven and that the Hon'ble the President of the Constituent Assembly wrote a d.o. to the Hon'ble the Prime Minister stressing on this point. He also promised to send a note across.

MANUFACTURE OF NATIONAL FLAG

Standardisation Plan

NEW DELHI, July 18: The manufacture of India's national flag will shortly be standardised by the Government of India, it is learnt here today.

The Indian Standard Institute is understood to have drafted a formula suggesting a uniform method for the production of the flag with the help of some particular chemicals. These chemicals will make the cloth durable and enable it to stand all climatic "calamities."

The formula, it is gathered will undergo a scientific test after its approval by the sectional committee for the national flag of India scheduled to meet here on July 21.—P.T.I.

"Times of India"
dated 19.7.49

This is not correct
AR

2. I mentioned the directive of the Principal Private Secretary to the Hon'ble the Prime Minister to the Committee.

3. The most important business of the Committee at this meeting was to examine and approve the sample of the worsted bunting manufactured by Mr. Longdin, a member on the Committee, and to do other business that may be brought before the meeting. The dyed worsted sample made by Mr. Longdin as well as other cotton samples dyed in green and saffron were examined and approved by the Committee subject to certain comments.

4. Slight amendments were suggested to the following paragraphs of the draft specifications (pages 47-52/cor):-

Para 2. 2 — Some verbal changes were suggested.

Para.2.5.1. ~~Some verbal alterations were suggested.~~ The sentence was ~~implied~~ amplified to bring out the intention correctly.

Para.2.8.2. An alternative to ~~the flag~~ 'flax' was suggested.

Para.3.7. Alternative to 'flax' suggested.

Para.3.8. 'Cotton cordage' was suggested in addition to 'cordage hemp'.

5. As a major issue was raised on account of the directive of the P.P.S. to H.P.M., it was resolved that the specifications for cotton buntings already prescribed be re-examined. It was tentatively suggested that two or three samples of hand spun cotton fabrics of minimum standards should be obtained and examined as to their suitability for use and specifications drawn up accordingly; and that also ~~specifications for~~ sample of cambric cloth of a certain standard should also be similarly tested and specifications prepared. It was decided that the results obtained should be discussed at the next meeting of the Committee to be held on 12th August, 1949.

6. The formal proceedings of the meeting may be awaited.

D.S. should also see.

A V Raman
22.7.49

~~D.S(F).~~

MINISTRY OF HOME AFFAIRS.

p. 5 ante

×pp. 60-61/Cor

1. D.O. from P.P.S. to H.P.M. and Secretary's direction thereon and Serial Nos ×18-19 (F.Rs)

2. In this connection the following facts are relevant:

The basis of action by the Indian Standards Institution for laying down specifications for the national flag was the resolution adopted by the Constituent Assembly on the 22nd July 1947 regarding the National Flag of India and the flag presented by the Hon'ble the Prime Minister to the Constituent Assembly of which the Indian Standards Institution and the Army Headquarters have had samples. In the view of the Indian Standards Institution, it was highly imperative that the National Flag of India should be standardized and uniformity maintained in the supplies as well as in the use of it and that it should therefore take up the matter at once. The Army Headquarters had assisted it by furnishing drawings and such other specifications in their possession required for the preparation of the necessary specifications. The Institute thereupon set about the work.

vide Serial 1/Corr.

The Textile Division Council of the Indian Standards Institution at the instance of the Army Headquarters decided that the Indian Standards Institution should take over the work of publication of a specification for the National Flag of India. It also decided that, after the G.H.Q. specification was ready, it should be referred to the Textile Division Council for their approval; but particular attention must be paid to the question of texture of cloth, fastness of colour etc. Attention was also drawn to certain aspects connected with display of flag on which information should be collected. Thereafter, the Textile Division Council resolved to set up the following Sectional Committee (TDC8) to deal with this subject:-

(1) Mr. Bharat Ram (Chairman).
(2) Mr. G.E. Longdin (The New Egerton Woollen Mills, Dhariwal).
(3) Dr. K. Venkataraman (Representative of Department of Chemical Technology, Bombay).
(4) A representative of the Army Headquarters (Mr. C.S. Ramanathan).

(7)

(5) A representative of the Directorate General of Industries and Supplies (Inspection Wing), and

(6) ~~A representative of the Directorate General of Industries~~
A representative of the Ministry of Home Affairs.

This Ministry was thereupon asked to nominate a representative and D.S.(J) directed that I should represent this Ministry and make a report to him as and when necessary. The first meeting of the T.D.C.8 was held on 28th January 1949 in my room vide agenda of the first meeting at pages 8-29/cor. A copy of the proceedings of the first meeting will be seen at pages 34-37/cor. which were shown to D.S.(J) who verbally indicated that the finalization of the specification should be awaited and put up in due course. The second meeting has now been held on the 21st July 1949, agenda for which will be seen at pages 46-59/cor. The formal proceedings of this second meeting are not yet ready but the note recorded by me at pages 3-4/n ante may be seen.

vide note p.1 ante

vide marginal note serial 9/C

3. ~~Although~~ It has been observed at the end of Dr. Rajendra Prasad's letter to the Hon'ble the Prime Minister that the Constituent Assembly was told and assured and that it might be assumed that the National Flag would be only of handspun and handwoven material and that it was not necessary to specifically mention it in the resolution adopted by the Constituent Assembly. It is, however, submitted that there was ~~is~~ no indication anywhere to the effect that handspun and handwoven textile fabric should be used in the preparation of the National Flag, either in the resolution of the Constituent Assembly or in the papers forwarded to this Ministry for issue of orders regarding the adoption of the National Flag, vide p.1/cor. (File No.87/47-Public (B)).

Flag 'H'

4. It is also necessary to indicate why the Indian Standards Institution followed its present course of action. In the present undertaking, the Institution depended on the G.H.Q. for specifications for woollen buntings. It is gathered from the Army Headquarters' representative (Mr. Ramanathan) that the flags required by the Army, in the absence of a direction to the contrary so far, are being

made from worsted buntings made from wool, machinespun and machine-woven, and a certain minimum standard of woven material has also been prescribed ~~from~~ for the same. The Army Headquarters evolved a specification for the woollen buntings used in making national flags, conforming to the original flag presented by the Hon'ble the Prime Minister to the Constituent Assembly, and which was tested and found to be suitable in practice. The TDC8 worked on this specification so far as woollen material was concerned. As regards cotton and silk fabrics, the Institution initiated their own specification from the point of view of durability fastness of colour, serviceability and easy availability of material. Taking all these factors into consideration, they had drawn up specifications as indicated in Annexure II to the Agenda for the first meeting of the Committee. Provided the fabric, silk or cotton is of the minimum standard prescribed in the specifications, the specifications recommended would be suitable even for handspun and handwoven material. The Institute could have also considered earlier samples of handspun and handwoven material, had they the benefit of advice of the All-India Spinners' Association which was being sought by them incessantly during the space of the last two years. The Association did not, however, care to reply so far. Only on the 22nd instant, as luck would have it, a letter was received by the Indian Standards Institution in which the Association agreed to nominate its representatives on the TDC8 as well as on other committees and the Director is requesting the Association to name the representative. In all probability the representatives will participate at the next meeting of the TDC8 proposed to be held on 12.8.49.

pp10-15/c

This is confirmed by Serial 18/C since received today. ASR 25/7/49

5. As a result of the d.o. from the Principal Private Secretary to the Secretary, I discussed the subject matter of the letter with the TDC8 on the 22nd at the Office of the Indian Standards Institution, Old Secretariat, Delhi. It was agreed that the representative(s) of the All-India Spinners' Association should be requested to attend the meeting of the TDC8 to be held on the 12th August 1949 and

produce suitable samples of handspun and handwoven fabrics which could thereafter be tested in regard to its use for National Flag and thereafter a specification evolved. It was also the view of the Committee, which was confirmed by the Army Headquarters' representative, that so far handspun woollen material of the requisite standard has not been produced out of which the National Flag could be made and that even if some of the available handspun woollen material is to be used, the cost might be prohibitive. ~~for~~ [illegible]. If, however, handspun woollen fabric can be produced at a nominal cost and which would stand all the tests for durability, fastness of colour and serviceability, there should be no objection to prescribe such a fabric for the National Flag.

6. The TDC are fully seized of the views of the Hon'ble the Prime Minister and the Hon'ble the President of the Constituent Assembly in the matter. No finalizations is expected to be made until the Committee has considered suitable samples of hand-spun and hand-woven material and have had the benefit of the advice of the All-India Spinners' Association.

(Just before signing the note, Serials 18-19 have been received and added to the file) F.R.

A V Raman
25.7.49

//A-17(F)// [illegible] The history of the case as well as the reasons why the question of using hand-spun and hand woven material for the National Flag was not considered earlier by the Indian Standard Institution are summarised in U.S.(Pb)'s note above. The statement in the letter from Mr. Verman at serial No.18, ~~in which it is stated~~ that repeated approaches had been made to the All India Spinners Association for cooperating with the I.S.I. during the past two years, but without success, is also significant.

Since the All India Spinners Association now agreed to assist the ISI in the matter of the use of hand-made cloth for the National Flag, it would be better to await the results of the deliberations of the Committee which is scheduled to meet on the 12th of August, at which it appears that Khadi interests will also be appropriately represented. If this view is accepted, a reply can be sent to Dr. Rajendra Prasad on these lines and a copy endorsed to the P.P.S. for his information.

26.7.49
(Fateh Singh)
Deputy Secretary.

Secretary.

Please look up the debates in the Constituent Assembly on the resolution moved by the Prime Minister for the adoption of the National Flag. My recollection is that it was agreed in the course of the debate that Khadi would be used — not necessarily cotton, of course, but also silk or woollen.

27/7

A copy of the relevant debates in the Constituent Assembly is put up at flag U. There is no specific mention in these debates that "Khadi" would be used for the National Flag. One of the two National Flags which the Honourable the Prime Minister presented to the House, when moving the Resolution about the adoption of the Flag, was, however, of Cotton Khadi. The idea perhaps was that "Khadi" or hand-woven Silk or Woollen material will be used for the National Flag. But this was not made clear either in the Resolution or in the debates on this Resolution.

29.7.49
(Fateh Singh)
Deputy Secretary.

Secretary.

as at A

30/7

Ref: S.No.20 and notes above.

A d.o. letter to Dr. Rajendra Prasad is put up for approval. An endorsement to PPS to HPM has been added to DFA.

R.D.S.
2.8.49.

2/8

A V Raman
2.8.49

P.A. to D.S.
may note & return
30/7

Recd on 1/8/49.

Seen. Thanks.
1/8/49.
Pol. Secto.

R.D.S.
1/8

I submit a revised draft for consideration.

3.8.49
(Fateh Singh)
Deputy Secretary.

Secretary.

3/8

S.No.21 Issue

(12)

from prepage

DFA has since issued vide Cor. on p. 64.

In the revised draft an endorsement has not been added to the PPS to HPM vide "A" on page 11/ante. We may, perhaps, do it now, as in the DFA.

RAS
5.8.49.

A V Raman
~~5~~ 6.8.49

5/8
~~U.S.(P&L)~~

Serial No. 22 J-65/c

Papers please.

Sd. A.V. Raman.
4.8.49.

Herewith please.

RAS
8.8.49.

9/8
~~U.S.(P&L)~~

No action as DS and Secy are aware of the first of official proceedings.

A V Raman
10.8.49

p.69/Cor.

S.(23)

F.R and Secy's direction thereon.

2. I personally contacted the P.M's Sectt as directed by D.S. Mr Mathai, D.S to P.M [illegible] was consulted. The Constituent Assembly was also consulted. Our Office papers were also consulted. The 'assurance' referred to by Hon'ble President of the C.A. cannot be traced.

The meeting of the Cte is for tomorrow, 12.8.49.

A V Raman
11.8.49

D.S(F). Secy. may see with reference to his remarks on F.R.

Secy.

11.8.49

(13)

I have asked PPS to obtain for me the Prime Minister's view on Dr Rajendra Prasad's letter. I propose to ask him also when I go to B'ly tomorrow.

Please give me a copy of Dr Rajendra Prasad's letter.

already given
RDS
13/8

12/8

DS (7)

As verbally directed by Secy., a draft to the Chairman Selection Committee for National Flag of India is put up.

12.8.47.

Secy.

Issue. This is in accordance with the directive from the PM which he said he has since communicated to me. I understand there may be a difficulty about woollen stuff required by the Army. I have asked Dr Verma to mention this [illegible], so that I could place it before the PM if necessary.

12/8

Also issue letter to Dr Rajendra Prasad

Serial Nos. 24-25 Issue. pp-70-72/c

Reference para. 2 of Secretary's note dated 12.8.49 on prepage.

× p.69/Cor.

A copy of Dr. Rajendra Prasad's letter× is placed at Slip 'L'.

RAJS
13.8.49.

13/8
Secy

A copy of the letter handed over to P.S. to Secy: who has given it to Secy: today.

RAJS
13.8.49.

S.No. 26 (Receipt) p-73/c
S.No. 27 (Issue) p-74/c

I enclose for information of Secretary a note on the meeting held today by the T.D.C 8 of the Indian Standards Institute on the Specification for the National Flag. Formal Minutes will issue in due course. The Committee is again scheduled to meet on 22.10.49.

A V Raman
12.8.49

12.8.49

~~D.S.(E)~~
Secy

13/8

13/8
Spr.

A.S.(Pr)

The Sectional Committee for the National Flag of the Indian Standards Institution made the following decisions:-

The Committee considered the possibilities of manufacturing the National Flag from Khadi in all the three varieties of fibres i.e. cotton, silk and wool. The representatives of organizations connected with the hand-spun and hand-woven materials in all the three varieties of fibres were acquainted with the ~~proposed~~ tentative specifications already drawn up in draft form by the Committee with the object of finding out the possibilities of manufacturing Khadi cloth as near the specifications meant for the mill made cloth. The Committee agreed that the Khadi cloth, cotton and silk should be manufactured by the All India Spinners' Associations and samples sent to Indian Standards Institution for obtaining test particulars of all the varieties. Samples along with the test particulars shall be scrutinized by the same Committee at its next meeting. As far as the manufacture of Khadi woollen cloth is concerned, the Committee said that it would be rather difficult to manufacture a cloth to the standard needed. However, the representative of the Sheep Wool Improvement Officer of Rajasthan Gov Jaipur, has agreed to manufacture, in the first instance, suitable khadi wool for the consideration of the Committee. All the khadi samples in cotton, wool and silk will be considered by the Flag Committee at their next meeting to be held on the 22nd of October, 1949. As regards sewing thread in cotton and silk, the representatives of the various Khadi Associations agreed to the use of mill made sewing thread as ~~already~~ ~~proposed~~ prescribed in the draft specification ~~earlier~~. There was some discussion on the cost of manufacturing of khadi cloth of these three varieties. It was felt that the cost of production will be somewhat higher than for cloth ~~those~~ obtained in the mills of ~~for~~ the same type ~~of cloth~~. It was estimated, particularly in the case of woollen cloth, that the khadi woollen cloth will cost about 75% to 100% more than that manufactured in the mills.

(17) D. 5745/[illegible]
1826.
~~18~~

PRIME MINISTER'S SECRETARIAT
NEW DELHI

17th August 1949.

DIS/7123.

My dear Iengar,

I enclose for your information a copy of the letter dated the 8th August, 1949, which the Prime Minister has received from Dr.Rajendra Prasad. As I have already informed you, the Prime Minister does remember an assurance that the National Flag be of hand-spun and hand-woven cloth. The assurance is not anywhere in writing, but there seems to have been an understanding expressed verbally. But assurance or no assurance, the Prime Minister is of the opinion that the official National Flag should be of hand-spun and hand-woven cloth - whether of cotton, silk or wool.

Yours sincerely,

A.V.Pai

(A.V.PAI)

We have already
issued the necessary
instructions to the Ch.
17/8

Shri H.V.R.Iengar, ICS:
Home Secretary.

Encl:1

18/8

R.O.S. 18/8 Pub.

(18)

Copy of letter dated the 8th August, 1949, from Dr.Rajendra Prasad, to the Hon'ble Prime Minister.

Some time ago I wrote to you about a Committee which is considering the question of standardizing the "National Flag". I learnt from your Secretary that a Committee had been appointed by the Home Ministry and the Defence Ministry and I wrote to Sardar Vallabhbhai Patel requesting him to instruct the committee to consider only hand-spun and hand-woven cloth for the 'National Flag'. I have received a letter from the Secretary of the Home Ministry informing me that the Committee is fully seized of my views regarding the matter and that the Home Ministry will await the result of the deliberations of the committee before taking any further action in the matter. My views have of course no authority and may even be considered irrelevant by the committee from the point of view of standardization. I would therefore request that the Government's views, which I hope, are in agreement with my views, should be made known to the Committee so that it may consider the question of standardization so far as the cloth is concerned with the limitation that it must be hand-spun and hand-woven. I do not know who the members of the Committee are and whether they have any knowledge of the background why hand-spun and hand-woven khadi was adopted during the period of the struggle for the 'National Flag' and why when the Constituent Assembly adopted the national flag the cloth was not particularly mentioned in the resolution itself. It is, therefore, necessary to let them know that the cloth was not mentioned because we were assured by the Government that it was assumed that it could not be any other cloth than hand-spun and hand-woven.

pp. 70-71/Cor

Reference D.O. correspondence on page 18 ante.

We have already issued the necessary instructions in the matter to the Chairman of the Selection Committee for National Flag of India and a copy thereof has been sent to the Hon'ble Dr. Rajendra Prasad. P.M.'s Sectt. may be informed accordingly. A draft d.o. is put up for approval.

19.8.49.

19/8
~~M.S (Plg)~~

~~D.S.(E)~~

A V Raman
20.8.49

22.8.49

-21- (20)

Home (F.C)
dm 24/8

R.D.S 25/8

No.F.41/3/49-Public.
Government of India.
MINISTRY OF HOME AFFAIRS.
New Delhi, the 25th August 1949.

Dear ~~Sir,~~ Mr Pai,

Please refer to your demi-official letter No.D/S/7123, dated the 17th August 1949, to Shri Iengar, regarding the use of hand-spun and hand-woven cloth for ~~Indian~~ the National Flag. We have already written to the Chairman of the Selection Committee for the National Flag of India that the flag intended for Government purposes should consist only of hand-spun and hand-woven cloth. A copy of ~~which~~ the communication is enclosed for your information.

2. A copy of the letter addressed to the Committee has also been sent to ~~the Hon'ble~~ Dr. Rajendra Prasad for his information.

Yours ~~faithfully~~ sincerely,

D.S.(F).

Shri A.V. Pai,
Principal Private Secretary
to the Hon'ble the Prime Minister,
New Delhi.

p.18/notes

Case No. 1998
Typed by M.R. 24/8
Compared by R.D. 24/8

*p.70/Cor.

ISSUED
On 25/8
Initial

21

MESSAGE FORM

A. R. P./M. 3.

Date	Time at which despatch of message was completed.	Telephonist's Initials

Address :—

Text of Message :—

Time of origin of Message :—

Address from :—

Signature (of official authorising the despatch of an "out" message).

Serial No. of Incident (inserted in Control Room)

Serial No. 28 p-75/c

Papers please.

Sd. A.V. Raman.
25.8.49.

Herewith please. Secretary has seen.

RDS
27.8.49.

Ch.
27/8
U.S. (Plet)

D.S. (F)

D.S. may like to see also.

AV Raman
29.8.49

Seen: thanks.

29.8.49

D.

R.D.S.
30/8

PA to DS(F) may pl. see & return

R.D.S.
30/8 ~~PA to DS(F)~~

30/8/49. x pp.76-79/C

Serial No. 29 p-80/c pp.73-74/Cor.

In this connection S.Nos. 26-27 may please be seen. Office is not aware whether the samples of the National Flag sent by Mitter Sain Rup Chand were shown to the Sectional Committee for the National Flag of India and its views obtained in the matter. In the proceedings x of the meeting held on 12.8.49, there is no mention of this.

As regards our requirements for the flags, we do not require any.

RDS
23.9.49.

Ch.
24/9
U.S. (Plet)

Please explain to him that no decision has yet been taken as regards the specification for the national flag. It is expected to be settled shortly and Govt are likely to adopt whatever is decided on by the T.D.C. re: national flag set up by the I.S.I. An announcement is also likely to be made in due course.

AV Raman
26.9.49

R.D.S.
26/9

(23)

Reference U.S.(Pb)'s note dated 26.9.49 on prepage.

A draft reply is put up for approval.

RAS
27.9.49.

28/9
~~U.S.(Pb)~~

A V Raman
29.9.49

S. NO. 30 Issue p.81/c

S. NO. 31 p.82/c

For information only.

RAS
25.10.49
RCN
25/10

A V Raman
26.10.49

US(Pb)

Mr RAS
26/10

Serial no.(32): Receipt. 87/c

Please give me the papers urgently.

Sd.A.V.Raman, 21.1.50.

Herewith.
K. Dh
23/1
US(Pb)

The postponed meeting re: standardization of the national flag is to be held on 30.1.50 at 10.30 am in my room.

D.S.(F) may see for infn. The Report attached to the F. R is not very encouraging. This is the ~~[illegible]~~ report of the test in the grey stage. The report in the finished stage, it seems, has not yet been received; nor has the report from Army HQrs regarding suitability of material for them been received yet. (File may be returned to me)

A V Raman
23.1.50.

on 25/1

U.S(Pb). ~~D.S.(F)~~ Seen; thanks. 24.1.50

1. Note prepage and F.R.

2. The meeting of the I.S.I was held in my room today. No final decisions have yet been reached. Four of the samples mentioned at p. 87/c have been approved and further tests in bleached stage, colour etc will be made and reported to the I.S.I at its next meeting to be held in the third week of March 1950. Certain specifications for woolen (bunting) fabric was laid down and samples would be sent up for test and results ~~reported~~ reported to the I.S.I at the next meeting.

A question was also raised as to whether all flags should conform in size to the ratio $\left(\frac{\text{length}}{\text{width}}\right)$ 3 : 2 as prescribed by the C.A. and whether a ratio ~~Could~~ 2 : 1 could also be adopted for large size flags. A point was also raised as to whether a separate fabric was required ~~at~~ to make the loop near the flag-staff and of the flag or whether the material of the flag could be used ~~to~~ for the purpose. These will be considered at the next meeting.

3. Formal minutes may be awaited.

D.S. may see for info.

AVRaman
30.1.50.

D.S.(I). The papers may be shown

(28)

to Secy. for information when minutes are received.

31.1.50

US(Pb).

Please await minutes.

A V Raman
1.2.50.

RDS 1/2

*

Serial No. 33.

*
pp.91-95/cor.

Papers please.

Sd. A,V. Raman.
8.3.1950.

Submitted.
~~Herewith please.~~ The proceedings of the meeting may now perhaps be shown to Secretary as desired by D.S.(F) in his note dated 31.1.50 above.

RDS
10.3.50.
T. 10/3

US(Pb)
D.S.(F)

A V Raman
10.3.50.

14.3.50

Recd. 13/3

Secy.

15/3

This file is submitted to U.S.(Pb) with reference to his remarks on the fortnightly statement that he wanted to see the papers.

2. Attention is invited to the ~~last~~ 6.4 paragraph of the minutes of the 4th meeting at p.95/cor. from which it will be seen that the fifth meeting was to be held in the last week of March. Apparently no meeting has yet been held since we have not received any agenda for the fifth meeting.

23 15/3

US(Pb)

RDS 16/3

24.5.50
T. 25/5

US(Pb)

Please issue draft to I.S.I.

A V Raman
26.5.50.

Sr. No. 34: Issue

pp 96 cor
PSA
30/5

F.R.
p. 97 Corr

Serial No. (35) Receipt.

With papers.

Sd. A.V.Raman
8-6-50.

Submitted with reference to U.S.(Pb)'s remarks on the F.R.

10-6-50.

D.S. may see for infn. (My letter to the I.S.I at p. 96/c refers).

A V Raman
12.6.50.

~~D.S.(P)~~

13.6.50.

14/6

F.R.
p. 98 Corr

Serial No. (36) Receipt

Please put up with file regarding standardisation of National Flag.

Sd . A.V.Raman.
14-6-50.

Submitted with reference to U.S.(Pb)'s remarks dated the 14th June 1950 on the F.R.

17-6-50.

No action. For infn.

A V Raman
19.6.50.

17/6

U.S.(Pb)

19/6

Ref. Sr. No: (35) at p. 97 Corr.

We have not yet heard anything about the date of the next meeting of the Committee. The I.S.I. may be addressed as in the draft put up for approval.

A V Raman
16.8.50.

16.8.50

14/8

U.S.(Pb)

p. 99 Corr

Sr. No: 37 Issue.

Sr. No: (38) Receipt

P.U.C
pp 100 corr

Papers.
sd A.V. Raman.
31. 8. 50.

Submitted.
We may wait for the meeting of the Committee till October 1950.

Osa
1.9.50

D.S. might like to see for infn

A V Raman
1.9.50.

U.S.(PL)

~~D.S(F)~~

Seen; the tests are taking too much time.

2.9.50.

Sr. No (39) Receipt

P. 101 corr

Papers.
sd. A.V. Raman
4. 11. 50.

Put up Mem.

Osa
6.11.50.

D.S (F) may see for infn

A V Raman
6.11.50.

~~U.S.(PL)~~

~~D.S(F)~~

It seems that we are not coming anywhere near the end. Can't U S (PL) do something to expedite the matters?

8.XI.50.

D.S (F)'s note at pre page (bottom)

2. Issue the draft d.o. below. It was indicated by D.S in discussion.

A V Raman
15.11.50.

p. 102 Corr.

Sr. No. (40) Issue.

p.u.c. / pp. 103-105

Sr. No. (41) Receipt.

Papers.

Sd. A. V. Raman
20.11.50.

Submitted.

PSA
21.11.50

K.S.C.
21/11

~~US(P6)~~

Issue ... [illegible] be done

After D.S (F) has seen Serials 40-41, I shall request the Defence Ministry as suggested by Mr Verman.

A V Raman
21.11.50.

Seen; thanks.

~~D.S(F)~~

[illegible]
22.XI.50.

~~US(P6)~~

Please put up a suitable draft to Defence Ministry

A V Raman
23.11.50.

PSA
27/11

I understand that I should address Shri M. K. Kutty, under Secy (D-6(a)) in the matter. Issue d.o. below at once.

p.29 infor

A V Raman
2.12.50.

D.O.No.41/3/49-Public. **IMMEDIATE.**

NEW DELHI,
the 4th December, 1950.

ISSUED
On 4/12
8
R. & I. A

My dear Kutty,

Sub: Standardization of the Indian National Flag.

You are perhaps aware that at the instance of the Army Headquarters, the Indian Standards Institution set up in 1948, the Sectional Committee for the National Flag of India (T.D.C.8) for standardisation of the Indian National Flag. I enclose for your information, a copy of an office note prepared by the Indian Standards Institution indicating the present position in the matter. You will see that the Committee is chiefly dependent on the Kanpur Laboratory for carrying out the tests on the material needed for standardization. The progress of the work of the Committee has so far been hampered due to the delay in completing the tests at the Laboratory. The President of India who is interested in standardising hand spun and hand made khadi material for the flag is likely to enquire at any time of the progress made in the matter; and we are anxious that we should not be placed in an embarrassing position in answering his queries.

pp 124-125 Corr

Sent

2. We should, therefore, be grateful if you could kindly move authorities at the Kanpur Laboratory to deal with the work with the utmost speed. We are fully aware that there may be other kinds of work on hand pertaining to the Defence Ministry. Nevertheless it should not be difficult to give greater attention to this work of testing the material for the National Flag of India. Mr.M.Krishnamurthy (of T.D.C.Army Headquarters) represents the A.H.Q. on the National Flag Committee.

Yours sincerely,

(A.V.Raman)

Shri M.K. Kutty,
Under Secretary,
Ministry of Defence (D 6(a)),
NEW DELHI.

pve // p v 6 cm

Sr. No. (42) Receipt

Papers.

Sd. A. V. Raman.
4-12-50.

Submitted. Incidentally it may be stated that 22nd December 1950 will be observed as a closed holiday in the Govt. of India offices at Delhi on account of Id-e-Milad. It may not, perhaps, be possible to hold the meeting on that day. The I.S.I. may be informed, as in the draft put up for approval.

d/a

Psa
5-12-50.

K. ~~[illegible]~~ 5/12

I told the Director, I.S.I. about our declaring 22.12.50 as a holiday; he said he would reconsider the matter and communicate to me any decision re: postponement of the date. I myself told him that I have no objection to the date inasmuch as it was already communicated to all concerned. I am awaiting a reference from the I.S.I. D.f.a need not issue.

2. D.S. may be for infn. my d.o. to the Defence Ministry and F.R. I have informed the I.S.I also of the d.o. reference.

A V Raman
5.12.50.

D.S.(F) Seen; thanks. I shd like to know the next date of the meeting if it is not held on 22.XII.50. [illegible] would see US(Pd) will no[illegible] a meeting convened 6.XII.50. [illegible] ~~[illegible]~~ as early as possible.

9/12

I was told by Mr Varman that the date 22.12.50 stands for the present.*

A V Raman
7.12.50.

PSA
8/12

Sr. No. (43) Receipt

pne / p. 107 Corr

Papers.

sd. A. V. Raman
9. 12. 50.

Submitted.

PSA
11. 12. 50.

Please submit to me
on 20. 12. 50.

A V Raman
11. 12. 50.

11/12
US (P6)

PSA / Pr. note Comply
11/12

Sr. Nos. (44)-(45) Receipt

pne / pp. 108-128 Corr

As desired by U.S. (P6), the file is submitted.

PSA
14. 12. 50

As regards S. 44, I informed Mr. Maharaj Kishen about the factual position and indicated that papers must be with the I.S.I. or the Army Hqrs.

S. 45 for information

A V Raman
14. 12. 50.

14/XII
US (P6)

The meeting of the I.S.I. was held yesterday in my room. In this connection, the Agenda for the meeting may be seen at pages 112-130. The specifications for the National Flag of India (cotton Khadi) were finalised. The specifications will be found at pages 121-126/corr. These specifications are subject to certain minor modifications as discussed at the meeting. It has been decided to finally prepare the specifications and get them printed within about a month's time. The Committee also would, provided the sampe of cloth is immediately available, try to prepare a flag on the specifications laid down for presentation to the President of India by the 26th of January. In case there may be some delay in finishing the usual formalities as to the finalization of the specifications ~~of the specifications~~ by the Textile Divisional Council, it will not be possible to have this flag ready.

This will be very desirable & J.S.(P2) should do his best to see that the flag goes through
23-12

2. As regards the specifications for the woollen flag, these specifications were tentatively decided upon; but the Committee desired to have a sample prepared and examined at its next meeting when the specifications will be formally finalized.

3. As regards silk fabric, certain samples were approved and required lengths have been requisitioned for dying and testing at the Kanpur Laboratory of the Defence Ministry. When the tested samples arrive, the specifications for silk fabric will also be finalized.

4. The Minutes of the meeting, when received, will again be submitted for information.

A V Raman
23-12-50.
(A.V. Raman).

D.S.~~(F)~~.
Secy.

23-12
23 XII 50

27/12

ack
28/12

27/12

GOVERNMENT OF INDIA

P&A (Some)
26/12

D.7437/50—Public
27—XII—50

D.O.No.2501/137/TDC8/MG/TD-8/
8276-MG/D.8(a).

New Delhi, the 20th December'50.

Dear Shri Raman,

STANDARDIZATION OF THE INDIAN NATIONAL FLAG.

p29 ante

Will you please refer to your D.O. No.41/3/49-Public dated the 4th December 1950, on the above subject, to Kutty. There is no gain-saying the fact that there has been some delay but it will be appreciated that all the Technical Development Establishments at Kanpur have been fully and continuously preoccupied with work of immediate importance and operational urgency since September 1949. Inspite of this, however, they had been continuing work on the various materials forwarded by the I.S.I. and had been keeping the I.S.I. advised as and when possible.

All the outstanding reports pertaining to the different lots of materials have already been forwarded to I.S.I.

Yours sincerely,

PBose

(P.C. BOSE)

Shri A.V. Raman,
Under Secretary,
Ministry of Home Affairs,
NEW DELHI.

MNS
1

No action

AVRaman
28.12.50.

D.O.No.41/3/49-Public.

NEW DELHI,
the 28th December, 1950.

My dear Krishnamurthy,

p-131 - Encl
enclosed

I enclose a copy of my d.o. to Shri Lal. C. Verman. We should be grateful if you could kindly get in touch with the Indian Standards Institution and see that even though the specifications may not be finalized before the 26th January 1951 at least a sample National Flag could be presented to the President on that day.

Yours sincerely,

O/c

(A.V. Raman)
UNDER SECRETARY.

ISSUED
On 28/12
Initial
R. & I. I.A

Shri M. Krishnamurthy,
Directorate of Technical Developments,
Ministry of Defence,
B- Block, New Delhi.

p131 cur Sr. No. (46) Issue

p132-134 cur Sr. No. (47)-(48) Receipt

p135 cur Sr. No. (49) Receipt

* p.36 infra &
p.136 cur

Please issue the two drafts* below and then submit the letters to D.S. (F) with file for information.

sd. A. V. Raman
5. 1. 1951

p. 136 cur Sr. No. (50) Issue

D.O.No.41/3/49-Public.

NEW DELHI,
the 5th January, 1951.

p135 corr

My dear Krishnamurthy,

Will you please refer to the letter from the Indian Standards Institution No.TDC 8/2A, dated the 3rd January 1951 (copy endorsed to you)? We should be grateful if you could take prompt action as indicated in para.2 of the letter so that the flag could be presented to the President of India on the 26th January, 1951. Please confirm.

Yours sincerely,

(A.V. Raman)
UNDER SECRETARY.

ISSUED
On 5/1
Initial
R.S.I.A.

Sri M. Krishnamurthy,
Directorate of Technical Development,
AHQ, MGO Branch,
~~DHQ PO~~, New Delhi.

D.S.(F) may kindly see in this connection also serials 49-50/corr. I shall post him with further developments from time to time.

A V Raman
5.1.51.

5.1.51

D.S.(F).

an
6/1

P&A
6/1

P.U.S./ H137-38 Corr

Sr. Nos. (51) - (52) Receipt

For information only.

PSA
16.1.1951

JS. DG
16/1

US(PG)

In this connection, I might draw D.S.(F)'s attention to S. 50/Corr.. Shri Verman tells me that they are having in view a ceremony for presentation of the flag to the President of India. This he considers now cannot be held on the 26th Jan. and the Institute do not desire to take a risk in the matter as the flag may not be ready in time. They would therefore present the flag a little later under intimation to this Ministry.

A V Raman
16.1.51

~~D.S.(F)~~ Seen; thanks. This is very satisfactory.

22.1.51

PSA
25/1

an
25/1

(38) [To be added to 41/3/49- Public] -38-

(Sr No 53-54 amalgamated)

Ministry of Home Affairs

(Public Section)

P.U.C. pp. 141-7 corr

Dy. No. 424/51- Public

Sr. No. (53) Receipt

Please draft a reply, saying that I have no comments & put up with file.

Sd. A V Raman
19. 1. 1951

Ref U. S.'s note on p.u.c. A draft is put up for approval. The file No. 41/3/49-Pub on the subject was sent to D. S. (F) on 16. 1. 1951.

A V Raman
24. 1. 51

Psh
23. 1. 1951

24/1

p. 148 corr

Sr. No. (54) Issue

Sr. No. (55) Receipt PUC / PP. 149-166 ann

File please.

Sd. A V Raman
22. 1. 1951.

Submitted.

PSC
29/1. 1951

D.S(F) might like to see the final specification, especially for cotton khadi, before I send a reply. The specifications are according to the decision of the Cte. | A

A V Raman
29.1.51

D.S(F). Seen; thanks. In view of 'A' above, I have nothing to add. This is all a technical matter. I hope we will receive a sample of the flag when it is finalised.
30.1.51.

Please issue the draft below to the Indian Standards Institution.

A V Raman
31.1.51

Sr. No. (56) Issue p. 167 ann

p.u.c./ p168 cor

Sr No. (57) Receipt

For information.

DSA
22.2.1951

A V Raman
23.2.51

US(P)

PSA
22/2

p.169/cor.

Serial No. 58 (F.R)

For information.

S N Kalia
19.3.51

D.S.(F) may also see. I was told by Mr Lal C. Verman in another connection that they are making attempts to ~~get the~~ have the flag-presentation ceremony soon. The final copy of the specification is also being sent to press.

A V Raman
19.3.51

US(P)

D.S.(F.)

20.3.51

PSA
21/3

p.170/cor

Sr No. (59) ~~and 60~~ Receipt.

p171/cor.

S. No (60): Issue

Sr. No. (61): Receipt

For information.

A V Raman
27.4.51

28.4.51

US(P)

PS
29/4

(41)

Sr. No. 62 (Receipt).

P. 173/Cor. JR

Papers please.

Itd. A.V.R(aman).
10.5.51

Our file on the subject is submitted ~~[illegible]~~.

D.S. might ~~to~~ like to see for infn.

A V Raman
11.5.51

12.5.51

P.S.
11.5.51.

11/5.

U.S.(Pb)

~~D.S.(F)~~

Ms P.S
14/5

J R.

Sr. No. 63. (Receipt). PP. 175-185/Corr.

Papers please.

Itd. A.V.R(aman).
14.6.51.

Our file on the subject is submitted.

P.S
15.6.51

15/6.

U.S.(Pb)

D.S.(F) and Secretary might like to see the final specification for the national flag (Cotton Khadi).

2. I may also add for information that the I.S.I. had noticed some defects in the sample flag manufactured at the Defence laboratories ~~and~~ at Kanpur and has requested the laboratory to remedy them and make revised samples. When these are ready, a flag will be presented to the President for which a simple ceremony is proposed to be held.

A V Raman
16.6.51

19.6.51

Recd.
18/6.

~~D.S.(F)~~.
Secy

Are we informing States Govts ~~[illegible]~~ & also giving this adequate publicity?

The document is necessarily technical. A summary which will be easily intelligible must be prepared in consultation with the Standards Institution.

20/6

20/6

~~US(P&)~~

(Note above and S. 64 (cor)) p-18/6

I have since learnt from Dr Verman, Director of the Indian Standards Institution that the Institution have already supplied State Govts (Parts A and Part B States only) with copies of the 'Specification for the National Flag of India', as ~~[illegible]~~ they all contribute towards the upkeep of the Institution in some way or other. No copies were sent to Part C and Part D States for which I have retained 11 copies for circulation. Extra

(43)

copies wanted will have to be obtained on payment from the Institution at Rs 2/- a copy.

2. Dr. Vaman requested that we should ~~circulate~~ circularise all State Govts drawing their attention to the specification for the national flag and instructing them to follow these directions whenever national flags are made. Copies (one each) of the Specification may also be sent to Part C and Part D States. Copies may also be endorsed to the Ministries for information and guidance.

3. As regards issue of a Communique, Dr Vaman also sent me copy@ of a Press communique which they had already issued through the P.I.B. It is comprehensive and is non-technical, giving at the same time all necessary details required by the layman. It would be hardly necessary for us to issue another communique. The note has already appeared in the news papers. We may however send a copy each to all States.

@ Encl. to S. 63

4. A draft to all State Govts is put up for approval.

d.f.a.

A V Raman
5.7.51

D.S.(XF) Secretary may see the draft, ~~that~~ which I have revised, before issue.

9.7.51.

Secretary.

9/7

D.
Psa
16/7

9/7

Sr. No. (65) Issue. 18/7

FR/P. 190 Corr

Sr. No. (66) Receipt

dfa

A draft is put up.

A V Raman
1.8.51

PSa
1-8-51
Gsmie
1/8
U.S. ~~(Pl.)~~

PP 191-92 Corr

Sr No. (67) Issue

P.U.C/PP 193-98 Corr

Sr. No. (68) - (71) Receipts

D.F.A.

We may in the first instance ask for some more copies of the pamphlet from the I.S.I. A draft is put up.

2. As regards para 2 of Sr. No. (68), reply will be given after we have recd. copies of the pamphlet as asked for in para 1 above.

PSa
7.8.51
Gsmie
8/8
U.S. (Pl.)

Please put up drafts as verbally directed.
A V Raman
8.8.51
9

Ref. U.S. (Pl.)'s note above.
Two drafts are put up for approval.

A V Raman
10.8.51

PSa
10.8.51
Gsmie
10/8
U.S. (Pl.)

DL S/K
on 8/8

M.P.S

48

Sr. No. (72) - (73) Issue pp/199-202/c

Sr. No. (74) Receipt p.203/c

Papers.

sd. A.V. Raman
21. 8. 51

Submitted. 3 drafts in reply to Sr. Nos. (68), (69) and (71) are also put up for approval.

O.F.A.
I, II, III

Psa
27. 8. 51

27/8.

U.S. (Pl.)

A V Raman
28/8/51

Sr. Nos. (75) - (77) Issue pp/204-209/c

Sr. No. (78) Receipt p.210/c

Comply.

Sd. Fateh Singh
20. 9. 51

We have no spare copies of the pamphlet entitled 'Indian

Standard Specification for National Flag of India (cotton khadi)' and may suggest to obtain it from the I. S. I. on payment as it is a priced publication, this was done in other cases as well vide Sr. Nos. 67 & 73. A draft is put up.

Y 192-3/cir
Y M 201-2/cir
DFA

OSS
21-9-51
K. De

US(VG) 21/9

A V Raman
22.9.51

Sr. No. (79) Issue. p-22/c

No.D/S/12716 (47) 47 No. D. 7780/51-Pub
23/11

PRIME MINISTER'S SECRETARIAT
NEW DELHI

21st November, 1951.

13
21-11

My dear Iengar,

I forward herewith, for such action as you may consider advisable, a letter dated the 16th November, 1951, from one Shri B.K. Chatterjea, raising certain matters relating to the National Flag. We may kindly be informed of the action you decide to take relating to these points.

2. I believe a committee, known as the National Flag Committee, was appointed to consider the question of standardisation of material, colour, etc., to be prescribed for the National Flag. We do not know what recommendations this Committee made and what decisions were reached by Government on these recommendations. I shall be grateful if you will kindly let me know what is the present position regarding the matters which were referred to this Committee.

Yours sincerely,

B.N. Kaul

(B.N. Kaul)

Shri H.V.R. Iengar, I.C.S.,
Secretary,
Ministry of Home Affairs,
New Delhi.

[illegible]

PSA
23/11

Business address:-
4/5A Waterloo st, Calcutta

B. K. CHATTERJEA A. G. W. I.
(City & Guilds of London)

CHAITAL ABAS
BALLY

Dated the 16th Nov 1951.

PPS

Secretary to the Hon'ble Prime Minister
New Delhi.

Respected Sir,

I most humbly beg to bring to your kind notice a rather disconcerting fact in our "National Flag"

Very great differences of shades, fading colours torn and ragged conditions, irregularities of Hoistings of the flags on some Govt. buildings not to speak of others used by the public, (sometimes the flags get bleached white while flying in the rain and sun) are too obvious to pass unnoticed. As our whole nation is symbolised by this flag there should not be the slightest variation or change regarding the shade, size, etc., etc., I do not know if any official notice of this has been taken or restriction or suggestion of a uniform standard has ever been made in this respect; but there is no doubt that a uniform standard is desirable. May I as a Dyeing and weaving expart offer a corrective suggestion for an uniform and unchanging standard?

Yours faithfully

(B. K. Chatterjea)

Copy to
Secretary to the
Hon'ble chief Minister
Writer's Buildings
Calcutta.

48A

PRIME MINISTER'S SECRETARIAT
INDIA.
No 6468-PMS
Dt 21-11-56

7R

Reference D.O. dated 21-11-51 from P.P.S. to F.P.M. at p.47 ante.

Please put up papers urgently.

Sd. Fateh Singh
22-11-51.

pp 166-85/corr
pp 187-88/corr
p. 189/corr

Submitted with reference to D.S.(F)'s note reproduced above. Please see in this connection (i) the pamphlet entitled 'INDIAN STANDARD SPECIFICATION FOR THE NATIONAL FLAG OF INDIA (COTTON KHADI)" finalised by the committee referred to in para 2 of the D.O.; (ii) the Press Note issued by the Indian Standards Institution and (iii) our letter dated 11th July 1951 addressed to the State Governments.

PSG
26-11-51.

We may bring these facts to the notice of the P.P.S. to P.M.

A V Raman
27.11.51

SG
26/11
U.S.(Pol)

~~D.S.(F)~~

Was not a copy of our circular letter dated 11.7.51 sent to the P.M.'s Sectt?

28.XI.51

PSG
29/11

Ref. D.S.(F)'s note above.

The answer to his query is in the negative. We have since issued instructions to all State Govts & Ministries etc. regarding the Central source of manufacture & supply of flags.

A V Raman
30.11.51

Q

PSG
29.11.51
SG
29/11
U.S.(Pol)

N.B./8/11

Secretary may see from page 47 ante. Since the letter from Mr.Chatterjea in which he has raised certain points regarding the shades, colours etc. of the National Flag has been sent to us (vide para.1 of Mr. Kaul's letter

page 48

PTO

at page 47 ante) for such action as may be considered advisable, it seems obvious that a reply to this letter should be sent by us. I, therefore, submit a draft reply for Secretary's approval. I also submit a draft reply to Mr.Kaul as the latter has requested that he should be informed of the action taken on the points raised in Mr.Chatterjea's letter.

4.12.51
(Fateh Singh)
Deputy Secretary.

Secretary.

5/12

Recd B.

(51) (51)

D.O.No.41/3/49-Public.
Govt of India M.H.A.

New Delhi-2, the 7 ~~8~~ December 1951.

Dear Kaul.

47 ante

Will you please refer to your D.O. letter No.D/S/12716, dated the 21st November, 1951, enclosing a letter from one Shri B.K. Chatterjea in regard to the National Flag? I enclose for your information a copy of the reply that we have sent to Mr. Chatterjea. A copy of the Press Note together with a copy of the pamphlet in which the standards of the National Flag have been laid down is also enclosed for your information. The attention of the various State Governments to the Press Note and the pamphlet was drawn in our circular letter No.41/3/49-Public, dated the 11th July, 1951. It is regretted that a copy of this letter was not endorsed to the Prime Minister's Secretariat. I send herewith a copy now for your information.

Yours sincerely.

sd/-

(H.V.R. Iengar)

Shri B.N. Kaul, I.C.S.,
Principal Private Secretary to
the Hon'ble Prime Minister.

P.Das
6/12

RC

No.41/3/49-Public.
Government of India.
Ministry of Home Affairs.

To

Shri B.K. Chatterjee,
4/5A Waterloo St. Calcutta.

New Delhi-2, the 7/8 December 1951.

Dear Sir,

With reference to your letter dated the 16th November, 1951, addressed to the Secretary to the Hon'ble the Prime Minister, raising certain matters relating to the National Flag, I am directed to invite your attention to the Press Note issued by the Indian Standards Institution, Delhi, on the 28th May 1951 of which a copy is enclosed for your information. It will be seen therefrom that a pamphlet entitled "Indian Standards Specification for the National Flag of India (Cotton Khadi)" has been published by this Institution which contains full details regarding the quality of the cloth and other particulars required for the manufacture of the National Flag. The State Governments have also been requested to give the widest possible publicity to the standards laid down by the Institution so as to ensure that these standards are adhered to in the manufacture of the National Flag. They have been further informed that the supply of National Flags of different materials e.g. Khadi, Silk etc., of the required standards can be arranged through a Central Ordnance Clothing Factory if their firm requirements are known in advance. You will, however, recognise that it is mostly for the public to uphold the dignity of the National Flag and extend their co-operation in following the rules prescribed by Government.

Yours faithfully,

Sd/-
(Fateh Singh)
Deputy Secretary to the Govt. of India.

P.Das
6/12

53

Correspondence

S.No.1

54

U.S.(P) Public

INDIAN STANDARDS INSTITUTION

Grams : Indstand New Delhi ● Phone : 7046/268 ● P Block
Raisina Road

Our Ref : Tex 5(4)/48

Your Ref : --

New Delhi, the 3rd November, 1948.

53

Subject : NATIONAL FLAG OF INDIA.

Dy. No. 9230/48-Pub dated 9-11-48.

The Secretary,
Ministry of Home Affairs,
Government of India,
NEW DELHI.

Dear Sir,

I have pleasure in informing you that the Textile Division Council (TDC) of the ISI, in its second meeting held on the 1st October 1948, decided to set up a Sectional Committee (TDC 8) to prepare the draft specification for the National Flag of India, with a representative of yours as a member of the Committee. I reproduce below the relevant extracts from the proceedings of the TDC meeting ibid for your information:-

> "The Council was informed that at the instance of Army Headquarters it was decided by the Executive Committee at its third meeting that the ISI should take over the work of publication of a specification for the National Flag of India.
>
> The Council NOTED the following decision of Executive Committee in this regard:
>
> > 'The EC DECIDED that after the GHQ specification was ready it should be referred to the Textile Division Council for their approval but particular attention must be paid to the question of texture of cloth, fastness of colour etc. The Chairman drew attention to certain aspects connected with display of flag and undertook to collect information on this point.'
>
> The TDC DECIDED to set up the following ~~adhoc~~ Sectional Committee (TDC 8) to deal with this subject:
>
> (1) Mr. Bharat Ram (Chairman),
> (2) Mr. G.E. Longdin,
> (3) Dr. K. Venkataraman,
> (4) A representative of the Army Headquarters,
> (5) A representative of the Directorate General of Industries and Supplies (Inspection Wing), and
> (6) A representative of the Ministry of Home Affairs."

I ....

I shall be glad if you will kindly let me have the name, designation and address of your representative on the above Committee, at a very early date, to enable me to convene a meeting of the Committee.

I enclose an extract from the Bye-laws of the ISI, regarding appointment of Principal and Alternative representatives and admissibility of travelling and daily allowances to Committee members, for your information.

recd.
8/11/48

Yours faithfully,

C P Halkatti

(C.P. HALKATTI)
ASSISTANT DIRECTOR(TEXTILES)

'SS'

I have discussed with D.S.(T) who wanted me to verify the bonafides of the Institute. I explained to him that it is a statutory body. He directed that I should represent. Issue letter below and resubmit.

A V Raman
18.12.48

S.No. 2

No. DY. 9230/48-Public.

Government of India,
Ministry of Home Affairs,
New Delhi, the 18th December, 1948.

From

Rao Sahib A.V.Raman, M.A.,
Under Secretary to the Government of India.

Issued
20/12/48

To

The Assistant Director (Textiles),
Indian Standards Institution,
P Block, Raisina Road, New Delhi.

Subject:- National Flag of India.

P/Cor.

Dear Sir,

With reference to your letter No.Tex 5(4)/48, dated the 3rd November, 1948, I am desired to say that the undersigned will represent this Ministry in regard to the National Flag of India. The delay in replying is regretted.

Yours faithfully,

(A.V.Raman),

Under Secretary to the Government of India.

(57) S.No.3 (4)

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand New Delhi • Phones : 2623 7046/268 • P BLOCK • RAISINA ROAD • NEW DELHI

Your Ref :
Our Ref : TDC 8/1A

2 December 1948.

Subject : NATIONAL FLAG OF INDIA.

The Secretary,
Ministry of Home Affairs,
NEW DELHI.

Dear Sir,

I shall be glad if you will kindly refer to my letter No. Tex-5(4)/48, dated 3 November 1948, on the above subject and let me know the name, designation and address of your nominee on the Sectional Committee for National Flag of India (TDC 8) of the ISI, without further delay.

Yours faithfully,

CHalkatti

(C.P. HALKATTI).
ASSISTANT DIRECTOR (TEXTILES).

18/12/48

RK:

56

S. No. 4 D 128/49 Bh
10/1/49

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand New Delhi • Phones : 2623 7046/268 • P BLOCK • RAISINA ROAD • NEW DELHI

Your Ref :
Our Ref : TDC 8/1A

7 January 1949.

Subject : FIRST MEETING OF THE SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA (TDC:8).

Chairman and Members of TDC 8.

Dear Sir,

I have pleasure in informing you that the first meeting of the above Sectional Committee will be held at 10.30 A.M. on Friday 28 January 1949 in Delhi. The exact place of meeting will be intimated later.

The meeting is not likely to continue for more than one day. I hope it will be convenient for you to attend.

The Agenda for the meeting will be forwarded shortly.

[illegible] 8/1/49 [illegible]

RDS

Yours faithfully,
C.P. Halkatti
(C.P.HALKATTI)
ASSISTANT DIRECTOR (TEXTILES).

RK Rao Saheb A.V. Raman,

(89) S.No.5 D.417/49-Bh
22/1/49

7

INDIAN STANDARDS INSTITUTION

Grams : Indstand
New Delhi
Phones : 2623
7046/268
● P BLOCK
● RAISINA ROAD
● NEW DELHI

Your Ref :

Our Ref : TDC 8/1A.

21 January 1949.

Subject : FIRST MEETING OF THE SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA (TDC 8)

The Chairman and Members of TDC 8.

Dear Sir,

With reference to my letter of even number dated 7 January 1949, enclosed please find the agenda for the meeting.

[illegible] 22/1/49

The meeting will be held in the room of Mr.A.V.Raman, Under Secretary, Ministry of Home Affairs at 8A South Block, Central Secretariat, New Delhi at 10.30 hours on Friday 28 January 1949.

Yours faithfully,

C.P. Halkatti

(C.P. HALKATTI)
Assistant Director (Textiles).

Encl:1.

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USJ/M. A. V. Raman Esq.

(60) ~~15~~

THE INDIAN STANDARDS INSTITUTION

CONSTITUTION

APPROVED BY
THE GENERAL COUNCIL
FEBRUARY 1948

PUBLISHED BY THE
INDIAN STANDARDS INSTITUTION
'P' BLOCK, RAISINA ROAD
NEW DELHI
1948

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THE INDIAN STANDARDS INSTITUTION

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INDIAN STANDARDS INSTITUTION
'P' BLOCK, RAISINA ROAD
NEW DELHI
1948

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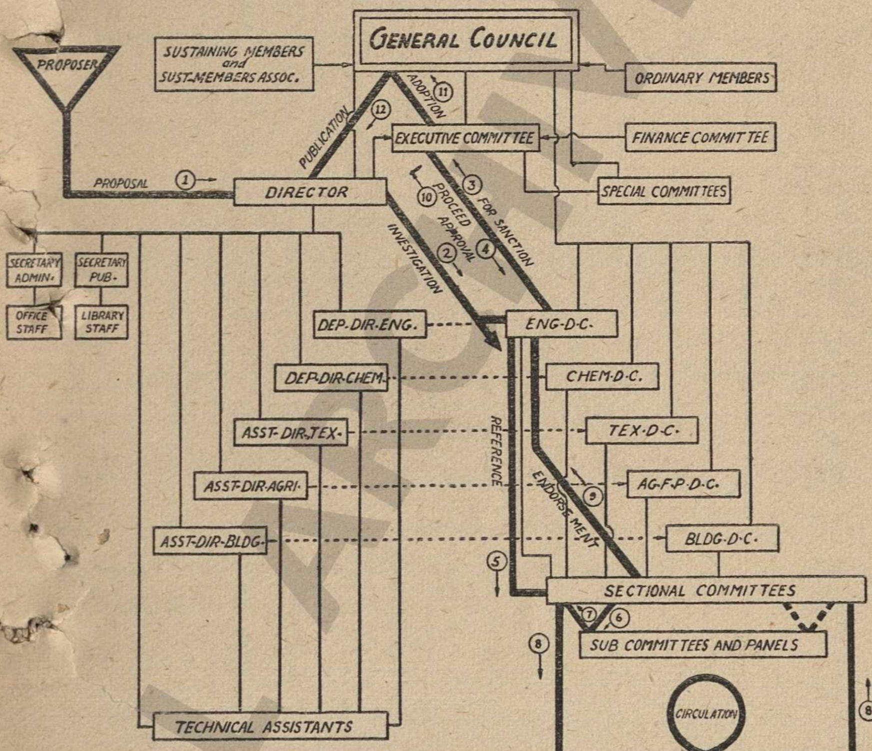
INDIAN STANDARDS INSTITUTION

ORGANISATION



GENERAL COUNCIL
SUSTAINING MEMBERS and SUST-MEMBERS ASSOC.
ORDINARY MEMBERS
PROPOSER
PROPOSAL
①
DIRECTOR
PUBLICATION
⑫
ADOPTION
⑪
EXECUTIVE COMMITTEE
FINANCE COMMITTEE
SPECIAL COMMITTEES
③ FOR SANCTION
⑩ PROCEED
APPROVAL ④
INVESTIGATION ②
SECRETARY ADMIN.
SECRETARY PUB.
OFFICE STAFF
LIBRARY STAFF
DEP-DIR-ENG.
ENG-D-C.
DEP-DIR-CHEM.
CHEM-D-C.
ASST-DIR-TEX.
TEX-D-C.
ASST-DIR-AGRI.
AG-F-P-D-C.
ASST-DIR-BLDG.
BLDG-D-C.
REFERENCE
ENDORSEMENT
⑨
⑤
SECTIONAL COMMITTEES
⑦
⑥
SUB COMMITTEES AND PANELS
⑧
CIRCULATION
⑧
⑧
TECHNICAL ASSISTANTS

A.B.R.
12.4.48.

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GOVERNMENT OF INDIA RESOLUTION

NO. 1 STD(4)/45

DEPARTMENT OF INDUSTRIES & SUPPLIES

NEW DELHI, THE 3RD SEPTEMBER, 1946.

Establishment of an "Indian Standards Institution"

1. The Institution of Engineers (India) has been acting as the Indian Committee of the British Standards Institution since 6th August 1919 on the recommendation of the Government of India. Generally British and American standards have been adopted for this country. Due to the diversity of raw materials available in India and the processes employed for manufacture, it has been felt increasingly that the British and other standards are not always suitable for adoption in this country. The question, therefore, of establishing a central standards organization in India for fixing Indian Standards is of vital importance.

2. The proposal for setting up of such an Institution in India was first raised at the 12th Industries Conference held in Lucknow in December 1940. Due to the war, however, the Government could not pay much attention to this, with the vast industrial plans that are contemplated in the immediate future, this question has become one of urgent importance. The Government of India have accordingly prepared a scheme for establishing a central standards organization in India which has already been circulated to all the Provincial Governments, Indian States, Chambers of Commerce, and other important industrial and technical organizations for their comments. The scheme has met with general acceptance from all sides.

3. The Government of India have, therefore, decided to set up an organization to be called the Indian Standards Institution with headquarters at New Delhi.

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4. The objects for which the Institution is being established are :—

(a) To prepare and promote the general adoption of standards on National and International basis, relating to structures, commodities, materials, practices, operations, matters and things, and from time to time to revise, alter and amend the same.

To consider and recommend to Government national standards for the measurement of length, weight, volume and energy.

(b) To promote standardization, quality, control and simplification in industry and commerce.

(c) To adopt such measures and take such steps and do all such things as may, in the opinion of the General Council, be conducive to the promotion of cordial relations between the Institution and persons interested in the objects of the Institution.

(d) To co-ordinate the efforts of producers and users for the improvement of materials, products, appliances, processes and methods.

(e) To provide for the registration of standardization marks applicable to the products, commodities, etc., for which it issues standards to be branded on or applied to those products, commodities, etc., which conform to Standards set.

(f) To provide or arrange facilities for the examination and testing of commodities, processes, and practices and for any investigation or research that may be necessary.

(g) To procure the recognition of the Institution in any foreign country or place.

(h) To collect and circulate statistics and other information relative to standardization in all its branches.

(i) To establish, form, furnish, and maintain libraries, museums, and laboratories for the purpose of furthering the practice of standardization.

(j) To communicate information to members on all matters connected with standardization and to print, publish, issue and circulate such periodicals, books, circulars, leaflets, and other publications as may seem conducive to any of the objects of the Institution.

(k) To establish, subscribe to, promote, become a member of, support, co-operate or amalgamate with any other association, society, institution or company, whether incorporated or not, whose objects are altogether or in part similar to those of the Institution.

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(l) To do all such other lawful things as the Institution may think identical or conducive to the attainment of any or all the objects of the Institution mentioned above.

5. The affairs of the Institution will be managed by a General Council which will, so far as is practicable, divide the work of the Institution into divisions for the more direct and convenient administration of the affairs and work of the Institution. The General Council will from time to time determine the number of divisions and the committees to be included in each division.

6. The General Council unless otherwise determined by the members thereof will be composed as under :—

(i) One representative each of the Government of India Departments of : Industries and Supplies, Commerce, War, Food, Health, Agriculture, Railways, War Transport, Finance, Posts and Air, and Labour	11
(ii) One representative each of the eleven Governor's Provinces	11
(iii) Five representatives of Indian States	5
(iv) Two representatives of the Institution of Engineers (India)	2
(v) Two representatives of the Council of Scientific and Industrial Research	2
(vi) One representative of the Indian Institution of Architects	1
(vii) One representative of the Imperial Council of Agricultural Research	1
(viii) One representative of the National Institute of Sciences (India)	1

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(ix) Two representatives of the Federation of Indian Chambers of Commerce, New Delhi 2

(x) One representative of the Associated Chambers of Commerce, Calcutta 1

(xi) One representative of the All-India Manufacturers' Organization, Bombay 1

(xii) One representative of the Federation of the Muslim Chambers of Commerce and Industries, New Delhi ... 1

(xiii) Chairman and two members of each Division Council 15

(xiv) One representative each to be elected by the sustaining and ordinary members of the Institution ... 2

(xv) Up to eight persons to be co-opted by the General Council 8

(xvi) Such other persons including nominees of Indian States as the Governor-General-in-Council may from time to time appoint.

7. The principal Officers of the General Council will be :—

(i) The President who will be the Hon'ble Member of the Governor-General's Executive Council in charge of the department dealing with the subject, now Department of Industries and Supplies.

(ii) Two Vice-Presidents who will be elected from amongst the members of the General Council every year.

(iii) The Director who will be the Secretary of the General Council and all such committees as the General Council may direct.

8. As regards finance, the income of the Institution will be derived from :—

(a) Government grants,

(b) contributions from industry, the Provinces, the States and other interested public bodies,

(c) subscription from members, and

(d) sale of Indian Standards, Specifications, etc.

To secure the financial position and ensure the ordered advance of the Institution, the Government of India have decided to make annual grants from year to year for a period of five years by which time they anticipate the Institution should be largely self-supporting.

(69)

9. The Government of India have further decided that the Institution should be registered under the Registration of Societies Act XXI of 1860. In order to comply with the requirements of the Act, a meeting of those who will constitute the General Council will be convened at an early date to consider the terms of the Memorandum of Association and the Rules and Regulations which have to be filed with the Registrar of Joint Stock Companies.

(Sd.) M. W. M. YEATTS
Secretary to the Government of India

Ordered that a copy of this Resolution be communicated to all Provincial Governments, Minor Administrations, Indian States and all Departments of the Government of India.

Ordered also that the Resolution be published in the *Gazette of India* for information.

(Sd.) M. W. M. YEATTS
Secretary to the Government of India

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MEMORANDUM OF ASSOCIATION
OF THE
INDIAN STANDARDS INSTITUTION

1. The name of the Society is the Indian Standards Institution (I.S.I.).

2. The registered office of the Society is at New Delhi.

3. The objects for which the Institution is established are as follows :—

(a) To prepare and promote the general adoption of standards on National and International basis relating to structures, commodiites, materials, practices, operations, matters and things, and from time to time to revise, alter and amend the same.

To consider and recommend to Government national standards for the measurement of length, weight, volume and energy.

(b) To promote standardization, quality, control and simplification in industry and commerce.

(c) To adopt such measures and take such steps and do all such things as may, in the opinion of the General Council, be conducive to the promotion of cordial relations between the Institution and persons interested in the objects of the Institution.

(d) To co-ordinate the efforts of producers and users for the improvement of materials, products, appliances, processes and methods.

(e) To provide for the registration of standardization marks applicable to products, commodities, etc., for which it issues standards to be branded on or applied to those products, commodities, etc., which conform to Standards set.

(f) To provide or arrange facilities for the examination and testing of commodities, processes, and practices and for any investigation or research that may be necessary.

(g) To procure the recognition of the Institution in any foreign country or place.

(h) To collect and circulate statistics and other information relative to standardization in all its branches.

(i) To establish, form, furnish, and maintain libraries, museums, and laboratories for the purpose of furthering the practice of standardization.

(j) To communicate information to members on all matters connected with standardization and to print, publish, issue and circulate such periodicals, books, circulars, leaflets and other publications as may seem conducive to any of the objects of the Institution.

(k) To establish, subscribe to, promote, become a member of, support, co-operate or amalgamate with any other association, society, institution or company, whether incorporated or not, whose objects are altogether or in part similar to those of the Institution.

(l) To do all such other lawful things as the Institution may think identical or conducive to the attainment of any or all the objects of the Institution mentioned above.

4. To achieve these objects, the Institution shall have powers,

(a) to undertake and execute any trusts or any agency business which may seem to the Institution conducive to its objects.

(b) To originate and promote improvements in the law and support or oppose alterations therein and to effect improvements in administration and for the purpose aforesaid to petition the Crown or any legislative or other body or authority and to promote deputations and to take such steps and proceedings as may be deemed expedient.

(c) To employ such staff as may be considered necessary and to establish, undertake, superintend, administer and contribute to a provident or benevolent fund for the servants of the Institution and their dependants.

(d) To invest any moneys of the Institution not immediately required for any of its objects in such a manner as may from time to time be determined.

(e) To purchase, take on lease or in exchange, hire or otherwise acquire any real and Personal Property which may be deemed necessary or convenient for any of the purposes of the Institution and to enter into other contracts and engagements.

(f) To accept any gift of property whatever, subject to any special trust or not, for any one or more of the objects of the Institution.

(g) To sell, manage, lease, mortgage, dispose of or otherwise deal with all or any part of the property of the Institution.

(h) With the prior approval of the Government of India, to borrow, raise or secure the payment of money in such a manner as the Institution may think fit and in particular by the issue of bonds, bills of exchange, promissory notes, securities, mortgages, or debentures charged upon all or any part of the Institution's property and to purchase, redeem or pay off any such securities.

(i) With the prior approval of the Government of India, to transfer all or any part of the property, assets, liabilities and engagements of the Institution to any one or more Institutions, associations, societies or companies whether incorporated or not with which this Institution is authorized to amalgamate and either gratuitously or for consideration.

(j) To do all such other lawful things as the Institution may think identical or conducive to the attainment of any or all the objects of the Institution.

(k) To obtain an Act of Legislature or a Royal Charter to enable the Institution to carry its objects or any of them into effect.

5. The General Council of the Institution shall be the Governing Body of the Society. The signatories to this memorandum shall be the first members of the General Council and shall continue as such till the General Council is constituted according to the Rules and Regulations of the Institution.

6. The income and property of the Institution, however derived, shall be applied towards the promotion of the objects thereof as set forth in this Memorandum of Association. No portion of the income and property of the Institution shall be paid or transferred directly or indirectly by way of dividends, bonus or otherwise, howsoever, by way of profit to the persons who at any time are or have been members of the Institution or to any of them or to any persons claiming through them or any of them, provided that nothing herein contained shall prevent the payment in good faith of remuneration to any member thereof or any person in return for any service rendered to the Institution or for travelling allowance, halting and other similar charges.

7. If on the winding up or dissolution of the Institution which shall be with the prior approval of the Government of India there shall remain, after the satisfaction of its debts and liabilities, any amount whatsoever, the same shall not be paid to, or distributed among, the members of the Institution or any of them, but shall be dealt with in such manner as the Government of India may determine.

8. We, the several persons whose names, addresses and descriptions are subscribed below, are desirous of being formed into an association in pursuance of this Memorandum of Association :—

1. The Honourable Dr. John Matthai, President of the Indian Standards Institution and Member in charge of the Department of Industries & Supplies, New Delhi.
2. Mr. M. P. Pai, I.C.S., Joint Secretary, Department of Industries & Supplies, New Delhi.
3. Mr. K. K. Chettur, Joint Secretary, Commerce Department, New Delhi.
4. Mr. G. M. McKelvie, Consulting Engineer (Roads), Transport Department, New Delhi.
5. Mr. Nagendra Singh, Deputy Secretary, Defence Department, New Delhi.
6. Mr. S. H. Y. Oulsnam, I.C.S., Secretary, Health Department, New Delhi.
7. Mr. D. N. Wadia, Mineral Adviser to the Government of India, Department of Works, Mines & Power, New Delhi.
8. Dr. Lal C. Verman, Director (Physical Section), Council of Scientific & Industrial Research, Delhi.
9. Prof. G. R. Paranjpe, National Institute of Sciences (India), " Sudarshan ", 202/1, Sadashiv, Poona 2.
10. Khan Bahadur A. R. Malik, Agricultural Marketing Adviser, Government of India, New Delhi.
11. Mr. I. Chatterjee, Assistant Agricultural Commissioner with the Government of India, New Delhi.
12. Dewan Nihal Chand, Director of Industries & Commerce, Alwar State, Alwar.
13. Rai Bahadur P. R. Agarwal, Loco Works Superintendent, B.B. & C.I.Rly., Dohad.
14. Dr. K. N. Mathur, Assistant Director, Council of Scientific & Industrial Research, New Delhi.
15. Mr. A. B. Thadhani, Department of Industries, Sind.
16. Mr. M. W. Abhari, Director of Industries, U.P., Lucknow.

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17. Mr. D. N. Ghose, Deputy Director of Industries, Government of Bengal, Calcutta.

18. Mr. P. K. Sen, Deputy Director of Industries, C.P., Nagpur.

19. Mr. M. P. Kanga, Director of Industries, Bombay.

20. Dr. L.C. Jariwala, Director, Estrella Batteries Ltd., Bombay.

21. Mr. Nanubhai B. Amin, Manager, Jyoti Ltd., Baroda.

22. Mr. Dorab Cursetji Driver, Deputy Agent, Tata Iron & Steel Co., 102A, Clive Street, Calcutta.

23. Mr. H. L. Khanna, Deputy Secretary, Food Department, Government of India, New Delhi.

24. Mr. A. G. Sadic, Chamber of Princes, New Delhi.

25. Mr. N. F. Frome, Chief Engineer, P. & T. Department, New Delhi.

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RULES AND REGULATIONS
OF THE
INDIAN STANDARDS INSTITUTION

Interpretation Clause

In these Rules and Regulations the following words shall have the following meanings :—

Words		Meanings
Institution ..	..	The above mentioned Indian Standards Institution.
General Council	..	The members for the time being of the General Council of the Institution.
Executive Committee	..	The Committee appointed by the General Council to direct and manage the day-to-day affairs of the Institution.
Finance Committee	..	The Committee appointed by the General Council to act in an advisory capacity for the proper conducting of the financial affairs of the Institution.
Division ..	..	A group of industries classified together by the General Council for purposes of administration.
Division Council	..	A Council established under these rules to administer the affairs of a Division.
Director ..	..	The Director for the time being of the Institution and shall include an acting Director.

Words importing the singular number shall include the plural number and words importing the male gender shall include the female gender.

SECTION 1

Members

1. The membership of the Institution will be open to all interested in the objects of the Institution.

2. There shall be three classes of members of the Institution, viz.,

(i) Sustaining Members — Sustaining Members shall be the Central Government, Governments of Provinces in India, Governments of States acceding to the Dominion of India, Governments of participating countries and States, organizations, companies, firms, corporate and non-corporate commercial bodies, professional, scientific, technological, educational and other institutions, and bodies who have representation on the Councils of the Institution.

There shall also be a sub-class of Sustaining Members designated as 'Sustaining Members (Associates)' whose sub-categories, qualifications, annual subscription, rights and privileges, etc., shall be defined in the Bye-Laws of the Institution.

(ii) ORDINARY MEMBERS — Ordinary Members shall be individuals interested in the objects and/or work of the Institution.

(iii) COMMITTEE MEMBERS — Any person serving on the General Council or on a Division Council or on any Committee of the Institution, who does not represent a Sustaining Member or is not himself an Ordinary Member, shall be a Committee Member during the period of such service.

3. Applications for Sustaining and Ordinary Membership shall be made on the prescribed form and shall be submitted to the Executiv Committee, and membership shall commence from the beginning of the calendar year during which the Executive Committee admits a member. Committee members, who will generally be nominated or co-opted, shall sign the roll of members kept by the Institution.

4. The annual subscription shall be at the discretion of the subscriber, but shall (i) not be less than Rs. 250/- for Sustaining Members; and (ii) not less than Rs. 25/- for Ordinary Members; and (iii) Committee Members, not otherwise classed as members, will not be required to pay any subscription.

5. RIGHTS AND PRIVILEGES. All rights and privileges of members, which may be different for the different classes of members, shall be laid down in the Bye-Laws.

6. (a) Any member required to pay a subscription and failing to do so, shall automatically cease to be a member on the expiry of a period of six months from the date on which the subscription falls due and no person or body shall be entitled to vote whose subscription at the time happens to be in arrears.

(b) Membership may be discontinued at the instance of the Executive Committee for sufficient cause in their discretion.

SECTION 2

Constitution and Working of the General Council

7. The affairs of the Institution shall be managed by a General Council.

8. The founder members of the first General Council of the Institution for purposes of Act XXI of 1860 shall consist of the persons who signed the Memorandum of Association of the Institution and thereafter shall consist of the members as detailed below :—

(i) Representatives of the Government of India Ministries as follows : —

1 Industry and Supply,
1 Commerce,
1 Defence,
1 Food,
1 Health,
1 Agriculture,
1 Railways,
1 Transport,
1 Communications,
1 Finance,
1 Works, Mines and Power, and
1 Information and Broadcasting.

(ii) Representatives of other Governments as follows :—

9 one from each of the Provinces of the Dominion of India, for the time being.
5 from the States acceding to the Dominion of India elected from among Institution Members.

One representative each of the Governments of participating countries and States who are Sustaining Members of the Institution.

Such other persons, not exceeding three, as the Central Government may appoint from time to time.

(iii) Representatives of organizations or bodies as follows :—

2 Council of Scientific & Industrial Research.
1 Indian Council of Agricultural Research.
1 Central Board of Irrigation.
1 National Institute of Sciences (India).
2 Institution of Engineers (India).
1 Indian Institute of Architects.

2 Federation of Indian Chambers of Commerce, New Delhi.
1 Associated Chambers of Commerce, Calcutta.
1 All-India Manufacturers' Organization, Bombay.
1 Indian Statistical Institute, Calcutta.

(iv) Representatives of various units of the Institution as follows:—

15 Chairman and two members elected by each Division Council.

One representative for every one hundred or fraction thereof to be elected by the Sustaining Members of the Institution limited to a maximum of five.

One representative for every two hundred or fraction thereof to be elected by the Sustaining Members (Associates) of the Institution limited to a maximum of two.

One representative for every one hundred or fraction thereof to be elected by the Ordinary Members of the Institution limited to a maximum of two.

(v) Up to eight persons may be co-opted by the General Council.

Officers of the General Council

9. (i) The Hon'ble Minister of the Central Government in charge of the Ministry dealing with the subject (now the Ministry of Industry and Supply) shall be the President of the Institution and of the General Council.

(ii) There shall be two Vice-Presidents of the Institution. They shall be elected from amongst the members of the General Council every year.

(iii) The Director of the Institution shall be the Secretary of the General Council and all such Committees as the General Council may direct.

Functions of the General Council

10. The functions of the General Council shall be as follows :—

(i) To administer the affairs of the Institution.

(ii) To determine what work shall be undertaken and to arrange for the conduct of such work.

(iii) To receive recommendations for investigations and research and to make provision as found desirable for such work to be carried out.

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(iv) To receive and deal with reports and recommendations of the Committees.

(v) To arrange for the publication of standard specifications, codes, reports and other documents.

(vi) To collaborate in kindred activities with National Standards Bodies in other countries and the International Organization for Standardization.

(vii) To control finance.

(viii) To control the staff of the Institution.

(ix) To do all such other lawful acts as would be conducive to the interests of the Institution.

(x) To make, alter and repeal from time to time, all such bye-laws as may be deemed necessary or expedient or convenient for the proper conduct and management of the Institution.

(xi) The General Council shall provide a seal and also provide for its safe custody. The seal of the Institution shall not be affixed to any instrument except under the authority of the General Council and in the presence of two members of the General Council or such other persons as the General Council may appoint for the purpose; and those two members or other persons as aforesaid shall sign every instrument to which the seal of the Institution is so affixed in their presence.

Proceedings of the General Council

11. (i) The President of the General Council shall, when present, preside at all meetings of the General Council.

(ii) If the President is not present at any meeting of the General Council, one of the Vice-Presidents shall be Chairman of the meeting. In the absence of the President and both the Vice-Presidents, the members of the General Council present at the meeting shall choose one of their own members to be the Chairman of that particular meeting.

(iii) Ten members of the General Council present at the meeting shall constitute a quorum at any meeting of the General Council.

(iv) Not less than 21 clear days' notice of every meeting of the General Council shall be given to each member of the General Council who shall for the time being be in India.

(v) One meeting at least of the General Council shall be held every year.

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(vi) For the purposes of the last Regulation each year shall be deemed to commence on the 1st day of April and terminate on the 31st day of March.

(vii) The President of the General Council may himself call, or by requisition in writing signed by him or by one-tenth of the members of the General Council may require the Secretary to call, a meeting of the General Council at any time, and on the receipt of such requisition the Secretary shall forthwith call such a meeting.

(viii) The President may refer any question, which in his opinion is of sufficient importance to justify such a reference for the decision of Government of India and such decision shall be binding on the Institution and its General Council.

(ix) Each member of the General Council including the President shall have one vote, and if there shall be an equality of votes on any question to be decided by the General Council, the President shall in addition have a casting vote. Votes shall be delivered by the members in person or by proxy.

(x) Any ordinary business which may be necessary for the General Council to perform except such as may be placed before a meeting, may be carried out by circulation among all its members and any Resolution so circulated and approved by a majority of the members signing shall be as effectual and binding as if such Resolution had been passed at a meeting of the General Council. Provided that at least 10 members of the General Council have recorded their views on the Resolution.

(xi) The members of the General Council shall be elected or nominated for a period of three years. At the end of every year as defined above, one-third of the members of the General Council shall retire from office but shall be eligible for re-election or re-nomination. Where vacancies are created by death or other causes, these shall be filled by nomination or election by the Bodies originally nominating or electing such members, within three months of the date of such vacancy ; otherwise, the General Council shall have powers to select nominees from amongst members of the Governments, Ministries, Provinces, States, Organizations or Bodies originally represented on the General Council.

Committees

12. The General Council may from time to time appoint committees for the purpose of considering and reporting on any of the affairs of

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the Institution or carrying on or promoting any of the objects of the Institution.

Ex-Officio Members

13. The Director of the Institution shall be ex-officio member of all committees.

Executive Committee

14. (a) The General Council shall appoint an Executive Committee with powers to direct and manage the affairs of the Institution, subject to the approval of the General Council and to keep the activities of the Institution, under review and report to the General Council from time to time.

(b) The Executive Committee shall consist of:

(1) The two Vice-Presidents	2
(2) Chairman of each Division Council (or either of the two representatives of Division Councils on the General Council) as alternative	5
(3) Representatives on the General Council of the	
(i) Ministry of Finance	1
(ii) Ministry of Industry and Supply	1
(iii) Ministry of Defence	1
(iv) Ministry of Agriculture	1
(4) One representative on the General Council of each of the following bodies, provided any official representative of theirs is not included under any other head above :	
(i) The Institution of Engineers (India) ...	1
(ii) Council of Scientific and Industrial Research	1
(5) Four representatives of the General Council, elected from separate interests from among such interests as may not be represented under any other head above	4

(c) The Executive Committee will elect their own Chairman out of the two Vice-Presidents.

(d) The Director of the Institution shall be the Secretary of the Executive Committee.

(e) One meeting at least of the Executive Committee shall be held every three months.

(f) Members of the Executive Committee shall hold office for a period of three years and shall be eligible for re-appointment at the expiration of any term of such service, provided always that their membership of the Executive Committee will be subject to their being members of the General Council for the time being.

(g) Four members shall form a quorum.

Finance Committee

15. (a) The General Council shall appoint a Finance Committee to act in an advisory capacity.

(b) The Finance Committee shall consist of :

(1) One representative of the Ministry of Finance on the General Council	1
(2) Chairman of each Division Council	5
(3) Four representatives of the General Council elected from separate interests from among such interests as are not officially represented under any other head above	4

(c) The representative of the Ministry of Finance on the General Council shall be the Chairman of the Finance Committee.

(d) The Director of the Institution shall be the Secretary of the Finance Committee.

(e) Members of the Finance Committee shall hold office for a period of three years and shall be eligible for re-appointment at the expiration of any term of such service, provided always that the members of the Finance Committee will be subject to their being members of the General Council for the time being.

(f) Three members shall form a quorum.

SECTION 3

Staff

16. (a) There shall be a Director of the Institution who shall, subject to the will of the General Council, be responsible for the conduct and of the activities of the Institution.

(b) In addition to the Director, there shall be such other staff as the General Council may think fit.

(c) The power to appoint, dismiss, remove or replace the Director, Deputy Directors, Assistant Directors, Secretaries and other employees of the Institution and fix and vary their respective salaries and terms of appointment shall be vested in the General Council or in committees or officers of the Institution under powers conferred on them by the General Council from time to time, subject to the sanction of Central Government for all employees so appointed on a salary of Rs. 600/- and over per month.

Branches

17. (a) The General Council may establish in any participating country, Province, or State, who is a Member of the Institution, a branch of the Institution.

(b) The General Council may appoint Branch Committees to assist in the administration of the affairs of the Institution in their respective branches.

(c) The function of the Branch Committees shall be to assist generally in the furtherance of the activities of the Institution and to discharge such duties as may be delegated to them from time to time by the General Council.

SECTION 4

Divisions

18. A Division is the main section of the activities of the Institution. The number and functions shall be determined from time to time by the General Council. The work of the Division shall be controlled by Division Councils appointed by the General Council.

SECTION 5

Division Councils

19. A Division Council shall be constituted from representatives of the respective interests of users, manufacturers, and other persons or bodies (professional or other), concerned in or associated with the industries included in the Division, and of the Government Ministry or Department particularly interested in such industries. The constitution of each Division Council shall be approved by the General Council. The Division Council shall have power to co-opt upto ten additional members.

The quorum of each Division Council shall be eight members.

Functions of a Division Council

20. The functions of a Division Council shall be as follows :—

(a) To make recommendations to the General Council as to work to be undertaken and make provision for work approved by the General Council to be undertaken.

(b) To appoint members of Sectional Committees.

(c) To receive from Sectional Committees and to endorse or otherwise deal with specifications, codes, and reports and when endorsed to refer them to the General Council for approval and publication.

(d) To receive and deal with the reports and recommendations of the Committees of the Division, and to submit recommendations thereon to the General Council concerning matters in which the General Council's decision is necessary.

21. (a) Members of the Division Council, including the Chairman and co-opted members, shall hold office for three years and shall be eligible for re-appointment at the expiry of such time.

(b) The Division Council will elect its Chairman from among its own members.

22. (a) The General Council shall have the power to :

- (i) create a new Division Council,
- (ii) define the constitution of a new Division Council,
- (iii) abolish an existing Division Council, and
- (iv) modify the constitution of an existing Division Council.

(b) The work of the Institution shall for the time being be distributed among the following Division Councils :—

- (i) Engineering Division Council.
- (ii) Building Division Council.
- (iii) Textile Division Council.
- (iv) Chemical Division Council.
- (v) Agricultural and Food Products Division Council.

Membership of the Division Councils

23. Division Councils for the time being shall be constituted as shown in Appendix I unless otherwise determined by the General Council.

SECTION 6

Sectional Committees

24. Sectional Committees will be appointed by Division Councils for the preparation of a particular standard or group of standards referred to it by the Division Council. The Sectional Committee shall be constituted of representatives of such interests as the Division Council shall decide are concerned in the standards or group of standards as referred to the committee. All interests shall be adequately represented including scientists and technicians, but the consumers' interests shall predominate. Provided that where statutory commodity committees exist as regards Agricultural and Food Products, they will form Sectional Committees for the purposes of the Agricultural and Food Products Division Council.

25. Chairman of Sectional Committees shall be appointed by the Division Council in consultation with the Executive Committee.

26. A Sectional Committee may appoint sub-committees and panels from its own members and/or invite interests to nominate representatives and may co-opt persons who by reason of specific attainments are qualified to assist such sub-committees or panels in the task allotted to them.

SECTION 7

Procedure in Preparing Standards

27. (a) The underlying principles for the preparation of standards are that they shall be in accordance with the needs of industry and fulfil a generally recognized want, that the interests of both producer and consumer shall be considered and that periodic review shall be undertaken.

(b) Any member of the Institution or any authoritative body may request the Institution to establish a standard for any specific subject or to revise an existing standard by formally submitting such request in writing.

(c) The work of standardization on any specific subject shall only be undertaken when the Division Council concerned is satisfied, after investigation and consultation with producer and consumer interests that the necessity for standardization has been established.

(d) When the subject has been so investigated and the need established by consultation with producer and consumer interests and approved by the Executive Committee of the General Council, the Division Council concerned shall refer the work to an appropriate Sectional Committee of the Division or shall appoint a new committee for the purpose. The committee shall then explore and study the subject and prepare a draft or drafts of the proposed standards.

(e) A draft specification or code prepared by a Sectional Committee or Sub-Committee after its approval by the Sectional Committee shall be issued in proof form for a period to be determined by the Committee but not less than three months and widely circulated amongst those likely to be interested for the purpose of securing critical review and suggestions for improvement which if found desirable shall be incorporated in the draft.

(f) The consideration of the comments received as a result of the proof issued will be undertaken by the Sectional Committee or Sub-Committee and the final draft prepared after verification in the appropriate laboratories where necessary.

(g) The specifications, codes and reports finally drafted by the Sectional Committees shall be referred to the Division Council concerned for endorsement and if endorsed will be submitted to the Executive Committee for approval and if approved shall be submitted to the General Council for adoption.

(h) Specifications, codes and reports adopted by the General Council of the Institution shall be given classification symbols and published by the Institution as Indian Standards Specifications, Codes and Reports.

(i) Any Standard adopted by a recognized organization, may on the recommendation of a Division Council be approved by the General Council if in its opinion the standard has been developed by an organization and procedure substantially in conformity with the procedure laid down by the Institution or if it has by actual practice been accepted as a standard.

(j) The existing organizations of the Ministry of Agriculture for grading agricultural products under the AGMARK and of the Ministry of Food for laying down standards and grades and the machinery for the control of their quality will be recognized by the Institution. Any standards already adopted or that may be adopted by these two Ministries may be scrutinized by the Agricultural and Food Products Division Council or by a special Sectional Committee set up by this Division Council for that purpose for ratification and consideration by the General Council.

Publications

28. (a) Specifications, codes and reports approved by the General Council shall be published as Indian Standards Specifications, Codes and Reports.

(b) The Institution shall publish its Annual Report within six months from the end of the year to which it relates.

(c) The Institution shall also publish a half-yearly or quarterly or monthly bulletin as may be decided by the Executive Committee containing a summary of the activities of the Institution during that period.

(d) Complimentary copies of standards, annual reports, and bulletins shall be sent to members as they may be entitled to according to their rights of membership. General distribution shall be on a payment basis. The prices of publications shall be fixed by the Director, subject to the approval of the Executive Committee.

Accounts and Audit

29. The accounts of the Institution shall be subject to the audit of the Auditor General of India. The nature of the audit to be applied and the detailed arrangements to be made in regard to the form of accounts and their maintenance and the presentation of accounts for audit shall be prescribed by bye-laws to be framed by the General Council and approved by the Central Government with the concurrence of the Auditor General.

Annual Report

30. The Annual Report of the proceedings of the Institution and all work undertaken during the year, including the audited accounts, shall be prepared by the Executive Committee for the information of the Central Government and of the members of the Institution. This report shall be placed before a meeting of the General Council, the draft report being circulated to the members at least 3 weeks before the meeting, and also be laid upon the tables of the Dominion Legislature.

Alteration to the Rules and Regulations

31. The Rules and Regulations of the Institution may be altered or amended from time to time by a resolution passed by a majority of two-thirds of the members of the General Council present at any meeting which shall have been duly convened for the purpose; except that, in view of the powers vested in the General Council in paragraph 22 of these Rules and Regulations, the provisions of the Appendix to paragraph 23 may be revised or amended by a majority vote in any meeting of the General Council or by circulation as provided for in paragraph 11(x).

APPENDIX I

CONSTITUTION OF THE FIVE DIVISION COUNCILS FOR THE TIME BEING

(Vide para 23 of Rules and Regulations)

(a) Engineering Division Council

(i) Representatives of Ministries and Departments of Central Government as follows :—

1 Central Standards Office, Ministry of Railways.
1 Central Public Works Department, Ministry of W.M.P.
1 Central Waterways, Irrigation and Navigation Commission, Ministry of W.M.P.
1 Central Technical Power Board, Ministry of W.M.P.
1 Geological Survey of India and/or the Bureau of Mines, Ministry of W.M.P.
1 Roads Organization, Ministry of Transport.
1 Posts & Telegraphs Directorate, Ministry of Communications.
1 Civil Aviation Directorate, Ministry of Communications.
1 Directorate of Technical Development, Ministry of Defence.
1 Directorate of Mechanical Engineering, Ministry of Defence.
1 Engineer-in-Chief's Branch, Ministry of Defence.
1 Directorate of Ordnance Factories, Ministry of Defence.
1 Royal Indian Air Force, Ministry of Defence.
1 Royal Indian Navy, Ministry of Defence.
1 Directorate-General of Industry and Supply (Inspection Wing), Ministry of Industry and Supply.
1 Directorate-General of Industry and Supply (Development Wing), Ministry of Industry and Supply.
1 Directorate-General of Health Services, Ministry of Health.
1 Directorate of Agricultural Machinery, Ministry of Agriculture.
1 Forest Research Institute, Ministry of Agriculture.
1 All-India Radio, Ministry of Information and Broadcasting.
1 All-India Council for Technical Education, Ministry of Education. 21

(ii) Representatives of Organizations or Bodies as follows :—

2 Council of Scientific and Industrial Research.
1 Central Board of Irrigation.
3 Institution of Engineers (India).
1 Indian Roads Congress.
1 Indian Institute of Architects.
1 Indian Institute of Metals.
1 Mining, Geological and Metallurgical Institute of India.

1 Indian Mining Association.
1 Indian Engineering Association, Calcutta.
1 Engineering Association of India.
2 All-India Manufacturers' Organization.
1 Association of Indian Industries.
1 Indian Electrical Manufacturers' Association, Calcutta.
1 Steel Re-rolling Mills Association of India.
1 Machine Tool Manufacturers' Association and Small Tool Manufacturers' Association. 19

(iii) Representatives of Industries as follows :—
2 Iron and Steel.
2 Mechanical Engineering.
2 Non-Ferrous Metals.
2 Electrical.
2 Mining.
1 Agricultural Machinery and Implements.
1 Ship Building.
1 Telephone and Telegraph Engineering.
1 Radio and Electronics.
1 Aircraft.
1 Automobile.
1 Cinematography.
1 Scientific Instruments.
1 Watches and Clocks.
1 Chemical Engineering. 20

TOTAL 60

(b) Building Division Council

(i) Representatives of Ministries and Departments of Central Government as follows :—
1 Directorate of Technical Development, Ministry of Defence.
1 Engineer-in-Chief's Branch, Ministry of Defence.
1 Roads Organization, Ministry of Transport.
1 Central Public Works Department, Ministry of W.M.P.
1 Central Waterways, Irrigation and Navigation Commission, Ministry of W.M.P.
1 Bureau of Standards (Medical Institutions), Ministry of Health.
1 Forest Research Institute, Ministry of Agriculture.
1 Central Standards Office, Ministry of Railways.
1 All-India Council for Technical Education, Ministry of Education.
1 Directorate-General of Industry and Supply (Inspection Wing), Ministry of Industry and Supply 10

(ii) Representatives of Organizations or Bodies as follows :—
2 Council of Scientific and Industrial Research.
1 Central Board of Irrigation.
1 Indian Roads Congress.

2 Institution of Engineers (India).
1 Indian Institute of Architects. 7

(iii) Representatives of Industries as follows :—

2 Bituminous Products.
2 Builders, Hardware and Ironmongery.
2 Timber.
2 Clay and Ceramic Products.
2 Steelworks and Structurals.
2 Building Contractors.
1 Cement Manufacture.
1 Lime and Gypsum.
1 Natural Stone and Quarry Products.
1 Plumbing.
1 Electrical Wiring.
1 Heating, Ventilating, and Refrigeration.
1 Cement Products.
1 Asbestos Products.
1 Illumination 21

TOTAL 38

(c) Textile Division Council

(i) Representatives of Ministries and Departments of Central Government as follows :—

1 Textile Commissioner, Ministry of Industry and Supply.
1 Directorate-General of Industry and Supply (Inspection Wing), Ministry of Industry and Supply.
1 Government Test House, Ministry of Industry and Supply.
3 Directorate of Technical Development, Ministry of Defence.
1 Agricultural Development Commissioner, Ministry of Agriculture.
1 Forest Research Institute, Ministry of Agriculture.
1 All-India Council for Technical Education, Ministry of Education.
1 Directorate of Marketing and Inspection, Ministry of Agriculture. 10

(ii) Representatives of Organizations or Bodies as follows :—

1 Institution of Engineers (India).
1 Council of Scientific and Industrial Research.
1 Indian Council of Agricultural Research.
1 Indian Central Cotton Committee.
1 Technological Laboratories, Indian Central Cotton Committee.
1 Indian Central Jute Committee.
1 Travancore Coir, Mats, and Matting Manufacturers' Association.
1 Textile Association (India).
1 All-India Spinners' Association.
1 Bombay Millowners' Association.
1 Ahmedabad Millowners' Association.
1 South India Millowners' Association.
1 Bengal Millowners' Association.

1 Bombay Piecegoods Association.
1 Maskati Cloth Market Association.
1 Bombay Gamti Fancy and Kora Cloth Merchants' Association.
1 Federation of Woollen Manufacturers in India.
1 Indian Jute Mills Association.
1 Jute Research Institute, Indian Jute Mills Association.
1 Indian Hemp Association.
1 East India Cotton Association, Bombay. 21

(iii) Representatives of Industries as follows :—
2 Cotton Textiles.
1 Cotton Growing.
1 Jute Textiles.
1 Jute Growing.
2 Silk.
1 Wool.
1 Artificial Silk and other Synthetic Fibres and Textiles.
1 Hemp and Coir.
1 Textile Machinery.
1 Textile Mill Stores.
1 Knitted Garments and Hosiery. 13

TOTAL 44

(d) Chemical Division Council

(i) Representatives of Ministries and Departments of Central Government as follows :—
1 Directorate-General of Health Services, Ministry of Health.
1 Indian Agricultural Research Institute, Ministry of Agriculture.
1 Forest Research Institute, Ministry of Agriculture.
1 Central Standards Office, Ministry of Railways.
1 Directorate of Technical Development, Ministry of Defence.
1 Directorate of Medical Services, Ministry of Defence.
1 Directorate-General of Industry and Supply, Ministry of Industry and Supply.
1 Government Test House, Ministry of Industry and Supply.
1 All-India Council for Technical Education, Ministry of Education. 9

(ii) Representatives of Organizations or Bodies as follows :—
3 Council of Scientific and Industrial Research.
1 National Institute of Sciences (India).
1 Indian Research Fund Association.
1 Medical Council of India.
1 Indian Chemical Society.
1 Institution of Engineers (India.)
1 All-India Manufacturers' Organization.
2 Indian Chemical Manufacturers' Association.
1 Pharmaceutical and Allied Manufacturers' Association.
1 Indian Paint Manufacturers' Association.

1 Paint Federation, Calcutta.
1 Indian Paper Mills Association.
1 Indian Rubber Board.
1 Textile Association (India). 17

(iii) Representatives of Industries as follows :
2 Coal Carbonization and Tar Products.
2 Heavy Chemicals.
2 Petroleum Products.
2 Oils, Fats, Greases, and Soaps.
2 Plastics and Rubber.
2 Leather and Tanning.
2 Paints, Varnishes, Pigments, and related products.
2 Drug and Pharmaceutical Products.
2 Glass Ceramics.
1 Paper.
1 Photographic Products.
1 Wood Preservatives.
1 Disinfectants.
1 Fertilizers.
1 Fine Chemicals.
1 Dye Stuffs. 25

TOTAL 51

(e) Agricultural and Food Products Division Council

(i) Representatives of Ministries and Departments of Central Government and Provincial and State Governments as follows :—
1 Agricultural Development Commissioner, Ministry of Agriculture.
1 Agricultural Marketing Adviser, Ministry of Agriculture.
1 Fisheries Adviser, Ministry of Agriculture.
1 Dairy Development Adviser, Ministry of Agriculture.
1 Indian Agricultural Research Institute, Ministry of Agriculture
1 Forest Research Institute, Ministry of Agriculture.
1 Directorate of Technical Development, Ministry of Defence
1 Quarter-Master-General, Ministry of Defence.
1 Directorate of Marketing and Inspection, Ministry of Agriculture.
1 Technical Adviser, Ministry of Food.
1 Directorate-General of Health Services, Ministry of Health.
1 Directorate-General of Industry and Supply, Ministry of Industry and Supply.
9 One from each of the Provincial Governments.
5 One from each of States acceding to the Dominion of India represented on General Council for the time being. 26

(ii) Representatives of Organizations or Bodies as follows :—
2 Indian Council of Agricultural Research.
1 Council of Scientific and Industrial Research.
1 Central Board of Irrigation.
1 Nutrition Research Laboratories, Coonoor.

1 Institute of Plant Industry, Indore.
1 Indian Tea Cess Committee.
1 Indian Tea Association.
1 Indian Tea Planters' Association.
1 Indian Central Sugarcane Committee.
1 Indian Sugar Mills, Association.
1 Fruit Products Manufacturers' Association.
1 Institution of Engineers (India).
1 Indian Central Cotton Committee.
1 Indian Central Jute Committee.
1 Indian Coffee Board.
1 Indian Lac Cess Committee.
1 Indian Oil Seeds Committee. 18

(iii) Representatives of Industries as fol ows :—
2 Dairy Products.
2 Fisheries and Fish Products.
2 Meat and Meat Products 16
1 Tobacco Growing.
1 Tobacco Products.
1 Tea.
1 Coffee.
1 Wheat.
1 Rice.
1 Other Pulses and Cereals.
1 Food Grain Products.
1 Ghee.
1 Vegetable Oil Products.

TOTAL 60

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APPENDIX II

BYE-LAWS CONCERNING SUSTAINING MEMBERS (ASSOCIATES)

(Vide para 2 (i) of Rules and Regulations)

Sustaining Members (Associates) shall be of two sub-categories as follows :—

(1) Firms, Companies, Commercial Bodies, corporate and non-corporate, with an annual business of less than Rs. 2,50,000.

(2) Professional, Scientific, Technological, Educational and other Institutions and Bodies who specifically apply for membership in this sub-class.

The annual subscription for Sustaining Members (Associates) shall be at the discretion of the subscriber, but shall not be less than Rs. 100/- per member.

APPENDIX III

BYE-LAWS CONCERNING RIGHTS AND PRIVILEGES OF VARIOUS CLASSES OF MEMBERS

(Vide Paras 2 (i) and 5 of Rules and Regulations)

(a) Sustaining Members

(1) To receive free of charge one copy of the new and revised specifications, codes, recommendations, reports, and other publications issued by the Institution.

(2) To receive a discount of 20% on all additional copies purchased.

(3) To have access to the library of the Institution for purposes of reference.

(4) To have right to apply for information on standardization both in this country and abroad.

(5) To have the right to attend meetings of the Sectional Committees and Sub-Committees and panels of the Institution subject to the approval of the Chairman of the respective Committee and to give evidence.

(b) Sustaining Members (Associates)

(1) To receive free of charge one copy of the new and revised specifications, codes, recommendations, reports, and other publications issued by the Institution.

(2) To receive a discount of 10% on all additional copies purchased.

(3) To have access to the library of the Institution for purposes of reference.

(4) To have the right to attend meetings of the Sub-Committees and panels of the Institution subject to the approval of the Chairman of the respective Committee and to give evidence.

(c) Ordinary Members

(1) To receive free of charge a copy of the I.S.I. Bulletin containing summary of the activities of the Institution, which may be published half-yearly, quarterly or monthly, as may be decided by the Executive Committee.
(2) To receive a discount of 10% on all other publications of the Institution purchased.
(3) To have access to the library of the Institution for purposes of reference.

(d) Committee Members

(1) To receive free of charge one copy of all the literature and publications connected with the work of the Committee with which the Committee member is concerned.
(2) To have access to the library of the Institution for purposes of reference.
(3) To have the right to apply for information on standardization both in this country and abroad.
(4) To have the right to attend meetings of the Sectional Committees and Sub-Committees of the Institution subject to the approval of the Chairman of the respective Committee and to give evidence.

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THE INDIAN STANDARDS INSTITUTION

'P' BLOCK, RAISINA ROAD
NEW DELHI

APPLICATION FOR MEMBERSHIP

I/We hereby apply for Ordinary/Sustaining Membership of the Indian Standards Institution and send herewith Rs. . . . . by cheque/M.O. as subscription for the first year. If this application is duly approved, I/We hereby agree to be governed by the Rules and Regulations and the Bye-laws of the Institution and undertake to assist in furthering the objects of the Institution as laid down therein.

NAME . . . .

ADDRESS . . . .

. . . .

FOR ORDINARY MEMBERS

Degrees . . . . Age . . . . . years

Occupation/Designation . . . .

Employed at . . . .

. . . .

My speciality is . . . .

My advice and/or services will/will not be available to the Institution for work relating to standardization.

Date . . . . . .

Signature

P.T.O.

FOR SUSTAINING MEMBERS

We manufacture / deal in . . . .

. . . .

. . . .

We have research / development / control laboratories equipped for work on . . . . .

. . . .

whose facilities could be / not be made available for the work of the Institution relating to standardization.

We employ experts specializing in . . . .

. . . .

whose services could be / not be made available for use by the Institution.

Name and designation of our representative who will exercise membership privileges on our behalf is

NAME . . . .

DESIGNATION . . . .

Signature

Date . . . .

Official Designation

NOTE: The members will not be entitled to use the name of the Indian Standards Institution in any form for commercial purposes except with the previous written permission of the Institution.

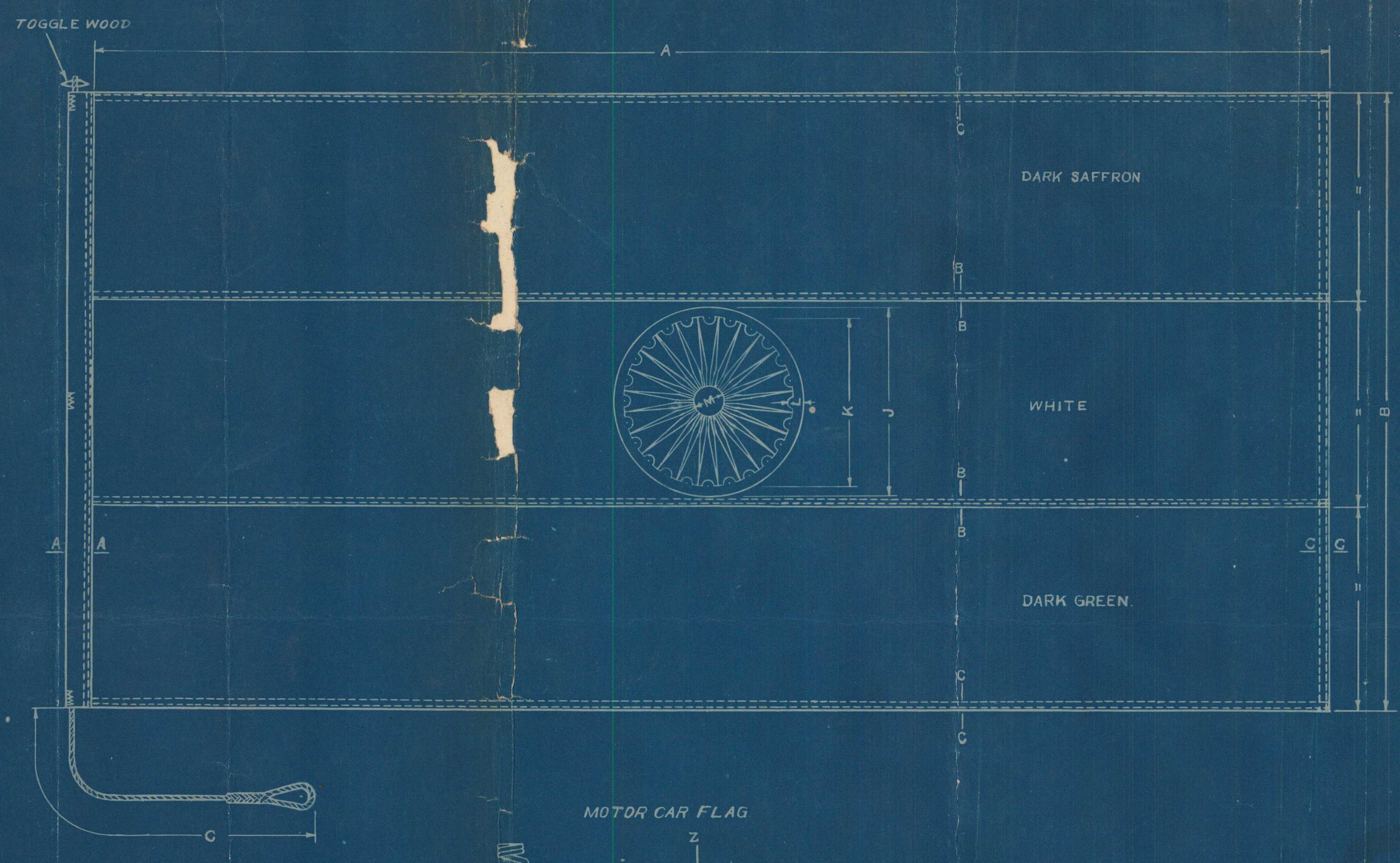
D.T.S. DRAWING No. 34

Appendix I

SEALED D. C. (1)

AMENDMENTS.

D.C.(1) DATE AND INITIALS.	NATURE.


TOGGLE WOOD
A
DARK SAFFRON
WHITE
DARK GREEN.
C
B
J
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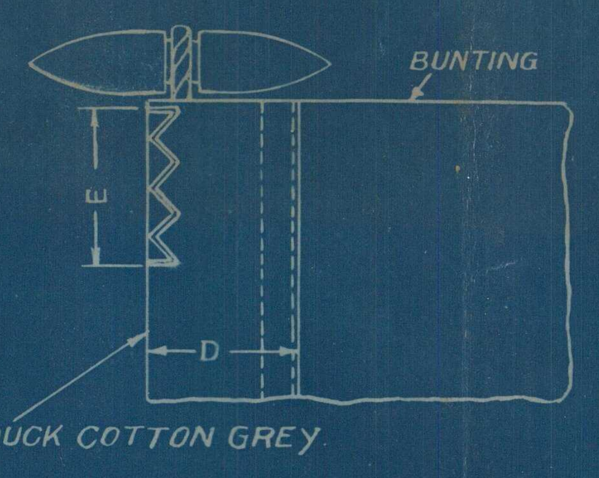
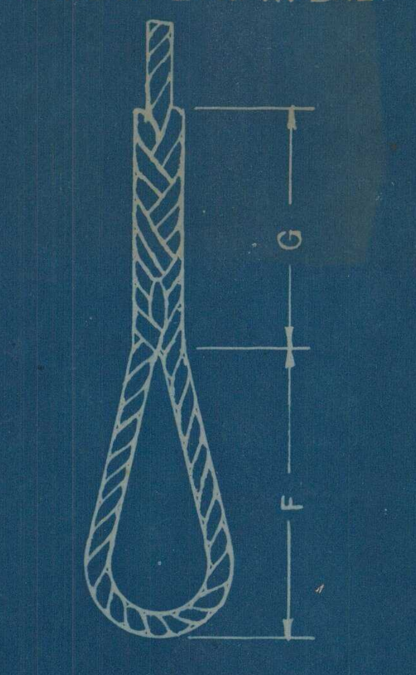
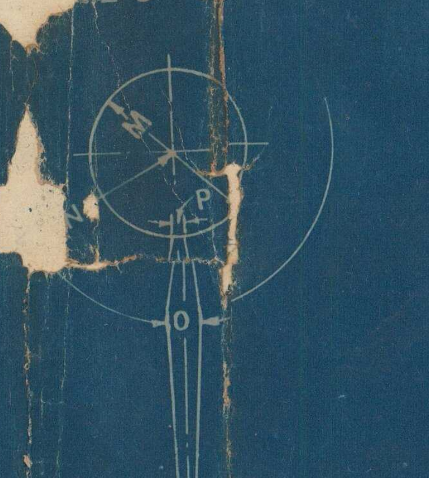
DETAIL OF TOGGLE WOOD


BUNTING
E
D
DUCK COTTON GREY

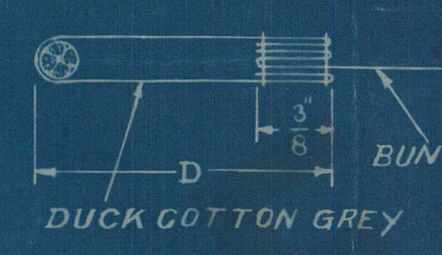
DETAIL OF LOOP AT END



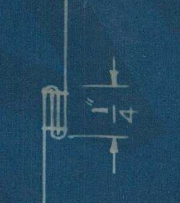
AIL OF SPOKE



SECTION OF SLEEVE AT 'AA'

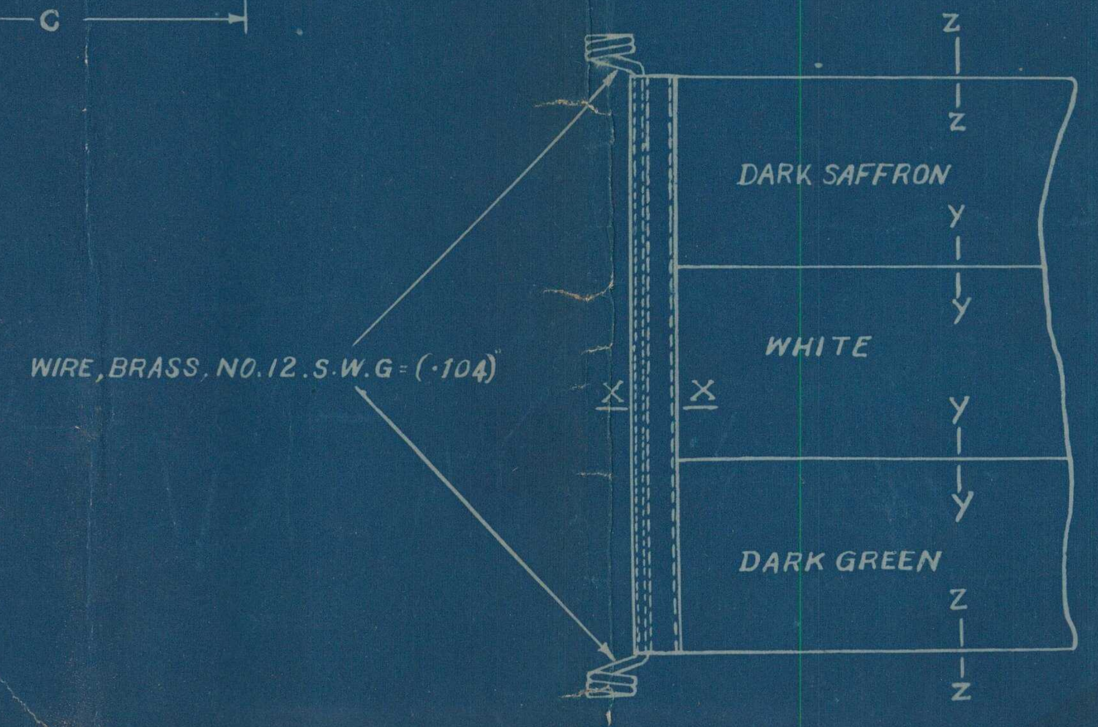

BUNTING
DUCK COTTON GREY

SECTION OF SEAM AT 'BB'

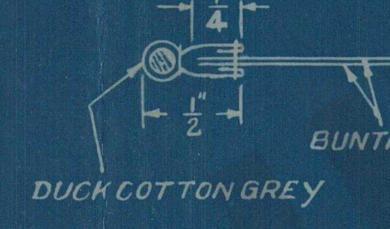


SEAM AT 'CC'

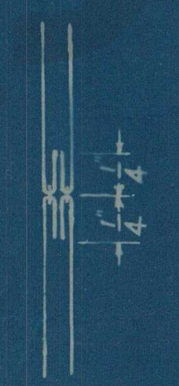
MOTOR CAR FLAG


WIRE, BRASS. NO.12. S.W.G = (·104)
DARK SAFFRON
WHITE
DARK GREEN
Z
Y
X

SECTION OF SLEEVE AT 'XX'


BUNTING
DUCK COTTON GREY

SECTION OF SEAM AT 'YY'



SECTION OF HEM AT 'ZZ'

WIRE, BRASS, ...G = (·104)
5/16" DIA

TABLE OF DIMENSIONS

	NO	SIZE	A	B	C	SLEEVE		LOOP		HEM	CHAKRA							CIRCUMFERENCE OF LINE HEMP	NO. OF TOGGLE WOOD
						D	E	F	G	H	J	K	L	M	N	O	P		
1JA0925	16064	21'×10½'	21'-0"	10'-6	5'-3"	0'-2½"	0'-1⅝"	0'-3"	0'-2½"	0'-1"	3'-5"	3'-⅜"	0'-3 1/16"	0'-6⅛"	0'-6⅛"	0'-1⅛"	0'-5/16"	0'-1¼"	4
1JA0926	16065	12'×6'	12'-0"	6'-0"	3'-0"	0'-2"	0'-1⅝"	0'-3"	0'-2½"	0'-½"	1'-11"	1'-8⅜"	0'-1¾"	0'-3½"	0'-3½"	0'-⅝"	0'-3/16"	0'-1"	3
1JA0927	16066	6'×4'	6'-0"	4'-0"	2'-0"	0'-1½"	0'-1⅝"	0'-3"	0'-2½"	0'-½"	1'-3"	1'-1¼"	0'-1 3/16"	0'-2⅜"	0'-2⅜"	0'-⅜"	0'-⅛"	0'-¾"	2
1JA0928	16067	6'×3'	6'-0"	3'-0"	1'-6"	0'-1½"	0'-1⅝"	0'-3"	0'-2½"	0'-½"	0'-11"	0'-9 11/16"	0'-⅞"	0'-1¾"	0'-1¾"	0'-5/16"	0'-3/32"	0'-¾"	2
1JA0929	16068	3'×2'	3'-0"	2'-0"	1'-0"	0'-1¼"	0'-1¼"	0'-2½"	0'-2"	0'-½"	0'-7½"	0'-6½"	0'-⅝"	0'-1¼"	0'-1¼"	0'-7/32"	0'-1/16"	0'-¾"	2
1JA0930	16069	9"×6" (MOTOR CAR)	0'-9"	0'-6"	–	0'-½"	–	–	–	–	0'-1½"	0'-1 5/16"	0'-⅛"	0'-¼"	0'-¼"	0'-3/64"	0'-1/64"	–	–

MATERIALS:-

Worsted Bunting Dark Saffron, White and Dark Green (of approved shade).
Sewing Cotton 6/36s (to match the shade of materials)
Duck Cotton Grey
Thread Flax Undyed
Line Hemp
Toggle Wood
Wire, Brass, No.12. S.W.G = (·104)" (for Motor car flag 9"×6")

MARKING:-

To be stencilled along the sleeve with size and manufacturer's name initials or recognized trade mark together with the year of manufacture.

NOTE:-

1. The device-CHAKRA- shall be painted/printed on either side of [illegible] Navy Blue colour as in the sealed pattern.
2. For Motor car flag which shall be made of two thickness[illegible]tings, the device shall be embroidered on separate pieces of worsted bunting [illegible]and-felled in position on either side of the flag.

L.L.C. SS.

CERTIFIED COPY

CORRECT COPY

24/11/48
I.O.S.

for CHIEF SUPERINTENDENT
DEVELOPMENT, CLOTHING,
SHAHJAHANPUR.

DATE 24/11/48

DRAWN BY	B.V. Ramaiah
TRACED BY	B.V. Ramaiah
CHECKED BY	L. Varadhai
PASSED BY	

FLAGS. NATIONAL, INDIA.

PRIME MINISTER'S SECRETARIAT, INDIA

NO. D/S. 6034 New Delhi, the 21st July, 1949.

5056-D/49-pah
d/21-7-49.

My dear H.V.R.,

I spoke to you yesterday about the National Flag and, as advised by you, rang up Lal C. Verman. I understand that there is a Committee consisting of representatives of Home and Defence Ministries and the Indian Standards Institute; and that this Committee is meeting in the Home Ministry today. I told your Under Secretary, A.V.Raman, who is a Member of this Committee, that Dr.Rajendra Prasad has expressed the hope that the Committee will bear in mind that the National Flag should be of stuff which is hand-spun and hand-woven.

I now enclose for your information a copy of the letter that Dr.Rajendra Prasad has written to the Prime Minister. I understand that the Committee's recommendations will be placed before the Home Ministry before any decision is taken. I therefore hasten to send on to you Dr.Rajendra Prasad's letter to the Prime Minister.

Yours sincerely,

AVPai

(A.V.PAI)

Shri H.V.R.Iengar, ICS:
Home Secretary.

I wd like to see the papers about this case — also the Proceedings of today's meeting
21/7
Mr Raman

(100) 97

Copy of letter from Hon'ble Dr.Rajendra Prasad, to Hon'ble the Prime Minister, dated 20th July, 1949.

I am enclosing a cutting from the "Statesman" of this morning. It appears that manufacture of National Flag is going to be standardised by the Government of India. I hope it will be borne in mind by those entrusted with the work that the National Flag should be of stuff which is hand-spun, and handwoven, whether it is cotton, silk or wool or any other fibre. You will recollect that when the question of the National Flag was under consideration, it was suggested that the resolution itself should lay down that it should be of Khadi but we were told and assured that that was assumed and it was not necessary to mention it in the resolution.

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AGENDA
for the
FIRST MEETING
of the
SECTIONAL COMMITTEE FOR THE NATIONAL FLAG OF INDIA
(TDC 8)
to be held in
Room No. 8A, South Block, Ground Floor,
Central Secretariat, New Delhi,
at
10.30 hours on Friday 28 January 1949.

Item 0. General

0.1 Welcome address by the Chairman.

Item 1. Composition of the Sectional Committee TDC 8.

1.1 The present composition of the TDC 8 is shown in Annexure I.

Item 2. Consideration of the draft specification for the National flag of India.

2.1 A draft specification prepared by the staff of the ISI is given in Annexure II.

2.2 A letter with enclosures giving details of the Union Jack, received from Commonwealth Relations Office, London is given in Annexure III.

2.3 Details of the National Flag of United States of America are given in Annexure IV.

Item 3. Any other business.

[illegible] Cawnpore

ANNEXURE I

(Item 1)

	Name		Address
1.	Bharat Ram, Esq. (Chairman)	-	Delhi Cloth & General Mills Co.Ltd., Delhi.
2.	G.E. Longdin, Esq.	-	The New Egerton Woollen Mills, Dhariwal (East Punjab).
3.	Dr. G.M. Nabar	-	Department of Chemical Technology, Matunga Road, Matunga, Bombay.
4.	C.S. Ramanathan, Esq.	-	Textile Adviser to the Controller of Development Stores, Directorate of Technical Development, Army Headquarters, New Delhi.
5.	S.K. Gupta, Esq.	-	Deputy Director of Inspection, Block No. 2, Shahjehan Road, New Delhi.
6.	A.V. Raman, Esq.	-	Under Secretary, Ministry of Home Affairs, Government of India, New Delhi.

Annexure II.
(Item 2)

INDIAN STANDARDS INSTITUTION
(ISI)
THE INDIAN STANDARDS SPECIFICATION FOR THE NATIONAL FLAG OF INDIA.

FOREWORD:

The Hon'ble Pandit Jawaharlal Nehru presented to the Constituent Assembly of India on 22 July 1947, two flags one of silk and the other of cotton khadi specially designed and manufactured for adoption as the National Flag of India. He moved the following Resolution:-

"Resolved that the National Flag of India shall be a horizontal tricolour of deep Saffron (Kesari), white, and dark green in equal proportion. In the centre of the white band, there shall be a Wheel in navy blue to represent the Charkha. The design of the Wheel shall be that of the Wheel (Chakra) which appears on the abacus of the Sarnath Lion Capital of Asoka.

The diameter of the Wheel shall approximate to the width of the white band.

The ratio of the width to the length of the Flag shall ordinaril be 2:3."

The motion was adopted, the whole assembly standing.

The Resolution passed in the Constituent Assembly on 22 July 1947 did not furnish full details regarding the quality of the cloth, and other particulars required for the manufacture of flags. Hence the necessity arose for the preparation of a self contained specification for the National Flag of India.

The Army Headquarters, India, who had drawn up a specification for the National Flag for the use of the Army suggested to the Indian Standards Institution to issue a specification for the National Flag on the basis of the one drawn up by them.

1. SCOPE:

1.1 This specification covers the essential requirements of the National Flag of India, adopted as the emblem of the Nation.

2. GENERAL:

India

2.1 The National Flag of India shall strictly comply with the terms of this specification, in respect of design and colour. The ratio of width to length of the Flag shall ordinarily be 2:3, but this could be altered to any other ratio in case of necessity. The Flag shall be a horizontal tricolour, of ~~deep~~ saffron (kesari), white and dark green in equal proportion. The top piece shall be of deep saffron, the middle white, and the bottom dark green. In the centre of the white band, there shall be a wheel in navy blue colour. The wheel shall be painted, printed or embroidered on both sides of the Flag.

2.2 The design and make up of the Flag shall be in accordance with the drawing as detailed in Appendix I. The Flag shall be manufactured from worsted bunting, cotton bunting or silk fabric. Stitching shall contain a minimum of 8 stitches per inch (3 stitches per centimetre) and shall match the shade of the material on which it is sewn.

and in conformity with the sealed sample held in the custody 1959

10 stitches per inch for worsted and cotton bunting
— for silk fabric
and 6 stitches per inch for duck

3. ....

3. MATERIALS:

3.1 The materials used for the Flag are given below:

(A) Worsted bunting of deep saffron, white, and dark green.
(B) Cotton bunting of deep saffron, white and dark green.
(C) Silk of deep saffron, white, and dark green.
(D) Duck Cotton Grey.
(E) Sewing cotton 6/36s - to match the shade of the cloth.
(F) Thread flax undyed.
(G) Line Hemp.
(H) Toggle wood as per drawing No.952.
(I) Wire brass No.12 SWG.

3.2 Requirements of these materials are as follows:-

(A) WORSTED BUNTING:

The bunting shall be free from flaws and manufactured from well combed worsted yarn. The bunting shall be clean, scoured and free from grease, soap, filling or any other foreign matter which may be used to give fictitious weight or firmness to the fabric.

MANUFACTURING DETAILS:

The bunting shall be woven plain and shall conform to the following essential quality particulars:-

Count Warp	Count Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq.yd. (g/sq.m)	Tensile Strength Warp Lb(Kg)	Tensile Strength Weft Lb(Kg)
2/36s	18s	32(13)	32(13)	3.75 ± 0.25 (127 ± 8)	35(16)	33(15)

DYEING: The bunting shall be piece dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

METHODS OF TEST:

(i) Count, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix II.

(ii) Fastness of dye to light shall be of at least Class 6 light fastness when the dyed fabric is tested according to the method described in Appendix III.

(iii) Fastness of dye to washing shall be determined by the method described in Appendix IV.

(B) COTTON BUNTING:

The bunting shall be free from weaving flaws and any other defect. The yarn shall be twisted firmly and uniformly.

MANUFACTURING DETAILS:

The bunting shall be woven plain and shall conform to the following essential quality particulars:

Count Warp	Count Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq.yd. (g/sq.m)	Tensile Strength Warp Lb(Kg)	Tensile Strength Weft Lb(Kg)
2/20s	10s	36(14)	32(12)	5 ± 0.5 (160 ± 16)	79(36)	60(27)

DYEING ....

DYEING: The bunting shall be piece dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

App

METHODS OF TEST:

(i) Count, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix II.

(ii) Fastness of dye to light shall be of at least Class 6 light fastness when the dyed fabric is tested according to the method described in Appendix III.

(iii) Fastness of dye to washing shall be determined by the methods described in Appendix IV.

(C) **SILK:**

The Pure silk fabric shall be free from weaving flaws and any other defect.

MANUFACTURING DETAILS:

The Pure silk shall be woven plain and shall conform to the following essential quality particulars: It shall not be weighted.

Count (in deniers) Warp	Count (in deniers) Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq.yd (g/sq.m)	Tensile strength Warp Lb(Kg)	Tensile strength Weft Lb(Kg)
60s	60s	106(42)	96/38	1.6 ± 0.1 (54 ± 3)	80(36)	72(33)

DYEING: The silk shall be piece dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

App

METHODS OF TEST:

(i) Count, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix II.

(ii) Fastness of dye to light shall be of at least Class 6 light fastness when the dyed fabric is tested according to the method described in Appendix III.

(iii) Fastness of dye to washing shall be determined by the method described in Appendix IV.

(D) **DUCK COTTON GREY:**

The duck shall be free from weaving flaws and any other defect.

The single and folded yarns shall be twisted uniformly. The duck shall be in loom state without dressing.

MANUFACTURING DETAILS:

The duck shall be woven plain and shall conform to the following essential quality particulars:

Count Warp	Count Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq.yd. (g/sq.m)	Tensile strength Warp Lb(Kg)	Tensile strength Weft Lb(Kg)
3/18s	3/18s	42(17)	32(13)	11 ± 0.5 374 ± 16)	250(113)	233(106)

METHODS ....

METHODS OF TEST:

Count, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix II.

(E) SEWING COTTON:

The sewing cotton shall be manufactured from carded or combe Egyptian cotton. The sewing shall be well spun, evenly twisted throughout, free from knots, short lengths and any other defect.

MANUFACTURING DETAILS:

The sewing cotton shall conform to the following essential quality particulars:

Count	Direction of Twist	Length of finished thread per Lb(per Kg)	Single thread Tensile Strength Lb(Kg)
6/36s	36Z/2Z/3S	4500 yd (9070 m)	5(2.25)

NOTE: Single yarn of 36s Count shall be twisted in 'Z' direction. Two such single yarns of 36s shall then be twisted in 'Z' direction and finally three such two fold yarns shall be twisted in 'S' direction.

DYEING: The sewing cotton shall be dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

PROOFING: The sewing cotton shall be proofed against mildew.

METHODS OF TEST:

(i) Count and tensile strength shall be determined by methods described in Appendix V.

(ii) Fastness of dye to light shall be of at least Class 6 light fastness when the dyed yarn is tested according to the method described in Appendix III.

(iii) Fastness of dye to washing shall be determined by the method described in Appendix IV.

(iv) Proof against mildew: The sewing cotton shall stand the test described in Appendix VI.

(F) THREAD FLAX UNDYED:

The flax shall be of the best quality and free from extranuous matter. The yarn shall be well spun, evenly twisted throughout, free from knots, short lengths and other defects.

MANUFACTURING DETAILS:

The flax thread shall conform to the following essential qual particulars:

Cord	Direction of twist	Length in yd.(in m)	Weight in gr.(in g)	Single Thread Tensile strength Lb(Kg).
3 cord	Z/S	300(274)	800(52)	7(3)

METHODS OF TEST:

Tensile Strength: Tensile strength shall be determined by the method described in Appendix V.

(G) ....

cordage

(G) LINE HEMP:

The hemp shall be of the best quality, clean and free from impurities of any description.

MANUFACTURING DETAILS:

The line hemp shall conform to the following essential quality particulars:

Size in.(cm)	No. of threads	No. of strands	Tensile Strength Lb(Kg)	Length of coil ft. (m)	Weight of coil Lb(Kg)
3/4(1.9)	12	3	336(152)	120(36.5)	2(1)
1(2.5)	15	3	560(254)	120(36.5)	4(1.75)
1¼(3.25)	15	3	672(305)	120(36.5)	6(2.75)

DIRECTION OF TWIST: Direction of twist in thread shall be 'Z', in Strands 'S' and in line 'Z'.

METHOD OF TEST:

Tensile strength shall be determined according to the method described in Appendix VII. VIII

(H) TOGGLE WOOD:

The toggle wood shall conform to the requirements detailed in IM Drawing No. 952 vide Appendix VIII.

(I) WIRE BRASS: Wire brass for motor car flags shall be of gauge No.12 SWG.

APPENDIX II.

Methods of tests for the determination of count of warp and weft, ends and picks per unit, weight per sq. unit and tensile strength.

1. CONDITION:

Fabrics shall be tested in standard condition.

Standard Condition: Standard condition of fabric shall be that reached by the fabric when in moisture equilibrium with a standard atmosphere having a relative humidity of 65 percent at 27°C (80.6°F) temperature, with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C(4°F) from the standard temperature, but the variation of temperature during any one series of test shall not be greater than plus or minus 1°C(2°F).

2. YARN COUNT:

Cuts 20 in (50 cm) apart shall be made in the fabric. Sufficient number of threads lying between the cuts to give at least 16 gr. (1 g) of yarn shall be frayed out. Allowance for crimp as indicated in para 3 below shall be made and the length of yarn ascertained. Weight of yarn shall then be determined and the yarn count calculated from the length and weight so obtained.

3. CRIMP:

Two parallel lines 20 in (50 cm) apart shall be marked on the sample at right angles to the warp or weft, the crimp of which is to be determined. 10 threads contained in the fabric which pass through these marks shall be frayed out to a distance of about 1 in (2.54 cm) beyond each mark, care being taken to avoid stretching the thread. Each thread shall be straightened by the application of a load just sufficient to remove the crimp. The length between the marks shall be measured by a rule correctly marked in standard English or metric units and the average length of the 10 samples between the marks ascertained. The crimp shall be recorded as a percentage, calculated as follows:-

$$\text{Crimp} = (L - 20) \times \frac{100}{20}$$ -: if the length is measured in inches. or:-

$$\text{Crimp} = (L - 50) \times \frac{100}{50}$$ --: if the length is measured in centimetres -

where L is the average length of the 10 samples between the marks after removal of crimp.

4. ENDS PER UNIT:

The fabric shall be laid out on a horizontal surface with enough tension to keep it flat but not enough to stretch it and the actual number of ends in 1 in (1cm) shall be counted at 5 or more places in the fabric and the test results noted. No two places counted shall include the same threads. If there be fewer than 25 ends per inch (10 ends per centimetre) the ends in 3 in (5 cm) shall be counted at 5 different places in the fabric and the average number of ends per inch (per centimetre) calculated.

5. PICKS PER UNIT:

The number of picks per unit shall be determined as indicated in para 4 above.

6. WEIGHT PER SQUARE UNIT:

Test specimens shall be made up of squares of at least 12 in (30 cm) sides. Each specimen shall be weighed and the weight per square unit i.e. oz/sq.yd(g/sq.m) calculated. The weight per square unit shall be the at least average of three test results.

7. TENSILE STRENGTH:

Test specimens each 2.25 in (5.5 cm) wide and 13 in (33 cm) long shall be cut from the sample. In 5 of these specimens the longitudinal threads shall be warp and in the other 5 weft. No two specimens shall contain the same longitudinal threads and no specimen shall be cut nearer the selvedge than 1/10 of the width of the fabric. Longitudinal threads shall be removed from each edge so as to produce fringes of 0.25 in (0.5 cm) or 15 threads whichever gives greater width. The frayed specimen shall be 2 in (5 cm) in width.

Test specimen shall be fixed in the jaws of the pendulum type of testing machine so that the distance between the jaws is 8 in (20 cm).

An initial tension shall be applied to the test specimen before it is finally secured in the jaws. The tension shall be uniformaly exerted across the width of the specimen and shall be sufficient to bring the specimen to tautness, but in any case shall not exceed 1 per cent of the probable tensile strength.

The rate of traverse of the pulling jaw shall be 12 in plus or minus 0.5 in(30.5 cm plus or minus 1.25 cm) per minute.

The tensile strength shall be the average of five test results and shall be expressed in Lb (Kg).

APPENDIX III.

Method of test for colour fastness to light.

Standard patterns of fastness to light shall consist of eight blue dyeings and shall be dyed on wool material. The dyestuff used shall be as follows:

Class.
1. 0.8 percent Brilliant Wool Blue FFR extra (I.G.).
2. 1.0 percent Brilliant Wool FFB extra (I.G.).
3. 1.2 percent Brilliant Indocyanine 6B (I.G.).
4. 1.1 percent Polar Blue G conc. (Gy).
5. 0.8 percent Solway Blue RS (I.C.I.).
6. 2.5 percent Alizarine Light Blue 4GL (S).
7. 2.5 percent Soledon Blue 4BC pdr. (I.C.I.).
8. 3.0 percent Indigosol Blue AGG (D.H.).

Note:- The above standard patterns issued by BSI shall be used as standard patterns.

Preparation ....

(110)

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Preparation of Test Specimen:

A sample of fabric measuring 2.5 in x 3 in (6cm x 8 cm) with the longer dimension running in the direction of the warp, or yarn wound on a white card board measuring 2.5 in x 3 in (6 cm x 8 cm) shall be prepared.

✓ Method of test:

The test specimen shall be placed in a holder which will shield it from the light except for an area of about 1.5 in x 2 in (4cm x 5cm), and shall be open to the air on both sides. The test specimen shall be covered with a good grade of window glass about 1/8 in (0.3cm) in thickness and shall be open at the sides to allow free access of air to the specimen. The distance between the glass and the specimen shall not be less than 0.5 in (1.25cm). The glass shall be kept well cleaned. The specimen shall be exposed to sunlight at an angle of 45° from the horizontal, facing south and no shadows shall be allowed to fall on the specimen. The exposure shall be made between the hours of 9 A.M. and 3 P.M. Cuttings from the standard patterns of Class 6 shall be exposed in a similar manner simultaneously with the test specimen for a sufficient length of time to cause a definite fading in the latter.

✓ Degree of fading:

The exposed specimen of the test material and the exposed specimen of the standard pattern together with the unexposed specimens of each shall be placed in the same plane and in such a position that some what diffused day light falls equally on all specimens at an angle of about 45°. The surfaces shall be looked at squarely.

The test specimen shall not show greater change in shade than the reference standard.

APPENDIX IV.

Method of Test for the determination of Fastness of Dye to Washing.

(a) Preparation of Test Liquor.- The test Liquor shall consist of 0.2 percent solution of actual neutral soap flakes in distilled water. The proportion of soap stated is of absolute dry soap, i.e., the water content of ordinary soap shall not be counted as soap.

neutral soap

(b) (i) Preparation of sample(for cloth). A portion of the material 4 in x 4 in (10cm x 10cm) shall be cut out and to it shall be sewn with white cotton thread a 2 in x 4 in(5cm x 10cm) piece of bleached undyed muslin cloth so that one half of the dyed material is covered while the other is uncovered.

(ii) Preparation of sample(for yarn) 4 in(10cm) long pieces of the sewing, weighing from 2 to 3 grams shall be bunched together and shall be tied on with white cotton thread, to a piece of bleached undyed muslin cloth 2 in (5cm) long and of such width as to cover the bunch entirely and to a piece of scoured white woollen material of the same size.

(c) Method of test.- The prepared samples shall be subjected to the washing treatment as follows:-

launderometer

The washing shall be done in a wash wheel carrying

stainless ....

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stainless steel covered jars. A quantity of test liquor about 50 times the weight of the prepared sample shall be placed in the jar and heated up to 60°C(140°F).

The sample shall then be placed in the jar and the jar fixed in the wash wheel, which shall then be rotated at 40 r.p.m. in a water bath also heated to and maintained at 60°C(140°F). The test liquor shall be changed after the first 10 minutes in order to minimise the effect of any finishing substances left in the material. The samples shall be removed from the jar after a total period of treatment of one and a half hours, well rinsed in warm water, centrifuged or mangled and finally dried.

The dyed material shall not change in shade and shall not show any signs of bleeding on the attached piece.

APPENDIX V.

Method of test for the determination of count of yarn and tensile strength.

1. **CONDITION:**

Yarn shall be tested in standard condition.

Standard Condition: Standard condition of yarn shall be that reached by the yarn when in moisture equilibrium with a standard atmosphere having a relative humidity of 65 percent at 27°C(80.6°F) temperature, with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C(4°F) from the standard temperature, but the variation of temperature during any one series of test shall not be greater than plus or minus 1°C(2°F).

2. **YARN COUNT:**

Lea of 120 yards shall be prepared by winding yarn on a wrap reel having a perimeter of 1½ yards.

The Lea shall be weighed and the yarn count calculated. The yarn count shall be the average of 20 test results.

3. **TENSILE STRENGTH:**

3.1 Lea Test: The Lea shall be broken on a pendulum type of testing machine. The rate of traverse of the pulling hook shall be 12 inches plus or minus 0.5 in (30.5cm plus or minus 1.25cm) per minute. Lea tensile strength shall be the average of 20 test results and shall be expressed in Lb(Kg).

3.2 Single Thread Test: The thread shall be fixed in the jaws of the pendulum type of testing machine so that the distance between the jaws in 20 in (50cm). The rate of traverse of the pulling jaw is 12 in plus or minus 0.5 in (30.5cm) per minute. The thread shall be broken and the tensile strength recorded.

The tensile strength shall be the average of 20 test results and shall be expressed in Lb(Kg).

Appendix VI ....

VII

APPENDIX VI.

Method of test for determining effectiveness of proofing against mildew.

5 lengths of the treated thread, each 1 yard (1 metre) long shall be taken, and tied into small bunches.

The bunches shall be placed in a petri dish or similar receptacle, together with 5 similar bunches of untreated thread previously boiled for half an hour in distilled water and dried. The 10 bunches of thread will then be sprayed with a mixture of spores of the following fungi:-

Penicillium	(Cawnpore stock culture	No. 55)
Aspergillus fumigatus	(" "	No. 3)
Aspergillus niger	(" "	No. 4)
Chaetomium globsum	(" "	No. 6)
Nemnoniella echinata	(" "	No. 30)
Rhizopus sp.	(" "	No. 20)

After inoculation, the dish, uncovered, shall be subjected to a temperature of 27°C ± 2°C(80° ± 4°F) and humidity of 90 percent to 100 percent for 14 days. If after this period the untreated thread shows growth of fungi, whilst the treated thread is completely unaffected, the proofing, shall be considered satisfactory.

VIII

APPENDIX VII.

Method of test for tensile strength of ~~line~~ cordage hemp.

CONDITION:

The ~~line~~ cordage hemp shall be tested in standard condition.

Standard Condition: Standard condition of ~~line~~ cordage hemp shall be that reached by the line hemp when in moisture equilibrium with a standard atmosphere having a relative humidity of 65 percent at 27°C(80.6°F) temperature, with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C(4°F) from the standard temperature, but the variation of temperature during any one series of test shall not be greater than plus or minus 1°C(2°F).

Tensile Strength: Three test specimens shall be cut from the coil. Each test specimen shall be of such length as to allow 3 ft (91.5cm) clear from the grip of the testing machine (horizontal good brand type) or splice ends. The rate of traverse of the pulling grip or hook shall be 6 in (15cm) per minute. Any test in which fracture occurs within 6 in (15cm) of either grip or splice ends at less than the specified tensile strength shall be disregarded and a fresh test taken.

The tensile strength shall be the average of 3 test results and shall be expressed in Lb(Kg).

Approved [illegible]

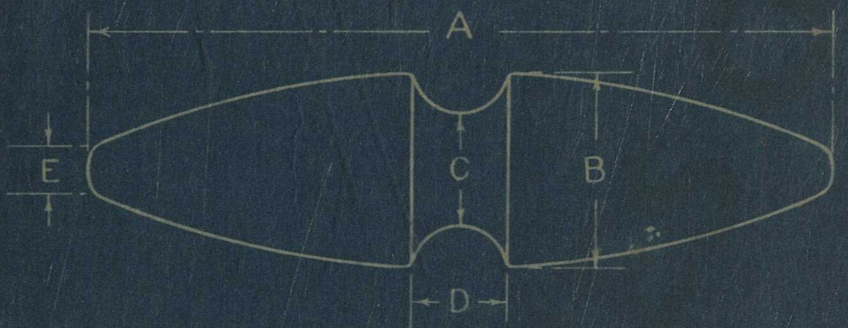
I.T.M. DRAWING No. 952

5184-M sealed.

TOGGLES, FLAG- | *wood.*

(Teak, Sal, Shisham, or Padauk)

I. L. C. § A-1022



SIZE	A	B	C	D	E	SIZE OF CORDAGE TO TAKE
1	2″	$\frac{9}{16}$″ Dia	$\frac{7}{16}$″ Dia	$\frac{3}{16}$″	$\frac{1}{16}$″ Dia.	$\frac{1}{2}$″
2	$2\frac{1}{2}$″	$\frac{9}{16}$″ Dia.	$\frac{7}{16}$ Dia	$\frac{1}{4}$″	$\frac{1}{8}$″ Dia.	$\frac{3}{4}$″
3	3″	$\frac{5}{8}$″ Dia.	$\frac{7}{16}$″ Dia	$\frac{3}{8}$″	$\frac{3}{16}$″ Dia.	1″
4	$3\frac{1}{2}$″	$\frac{3}{4}$″ Dia.	$\frac{1}{2}$″ Dia.	$\frac{7}{16}$″	$\frac{3}{16}$″ Dia.	$1\frac{1}{4}$″
5	4″	$\frac{7}{8}$″ Dia.	$\frac{5}{8}$″ Dia	$\frac{1}{2}$″	$\frac{1}{4}$″ Dia.	$1\frac{1}{2}$″
6	4″	1″ Dia.	$\frac{11}{16}$″ Dia.	$\frac{5}{8}$″	$\frac{1}{4}$″ Dia.	$1\frac{3}{4}$″
7	4″	1″ Dia.	$\frac{11}{16}$″ Dia.	$\frac{11}{16}$″	$\frac{1}{4}$″ Dia.	2″

(COPY)

ANNEXURE III

(Item 2)

Ref:Pol.11556/48.

COMMONWEALTH RELATIONS OFFICE,
DOWNING STREET,

30th November, 1948.

Please refer to your letter 48/P/26 of 26th October, enclosing an enquiry from the Indian Standards Institution about a National Flag specification.

2. As you surmise, the United Kingdom position as regards the Union Jack is not very definite or clear cut. After considerable research, I am afraid that the following information is as much as we can obtain from the various authorities consulted.

3. As regards flags in general use, the Home Office and the College of Arms assure us that there is no general specification for the Union Jack. The cloth normally used is bunting, but it can be anything. The size is not fixed, but the proportion of width to length is 3:5. The flags supplied by the Ministry of Works for use on public buildings are 3 yards, 4 yards and 5 yards long, the 3 yards size being the one most commonly used.

4. As regards flags in use at diplomatic and consular posts, I attach a copy of an extract from the Foreign Office List and Diplomatic and Consular Year Book for 1948, and also of an "Order in Council respecting Union Jacks and other flags displayed by British diplomatic, consular and other authorities, August 7, 1869". From these extracts it will be seen that flags for the purposes therein specified are made in the proportion of 1:2 and not 3:5. The attached copies of pages 12 - 15 inclusive and of the table from page 17 of the Admiralty publication "Flags of all Nations" give further details about naval flags which may prove useful.

5. The 14th Edition of the Encyclopedia Britannica has an article about flags which may also be of assistance to the Indian Standards Institution.

6. I hope this information will satisfy the Indian Standards Institution. If not, perhaps you will let us know, and we will do our best to find the answers to any further questions.

(COPY)

Extract from Foreign Office List and Diplomatic and Consular Year Book for 1948.

FLAGS TO BE USED BY DIPLOMATIC AND CONSULAR OFFICERS.

The usual size is as follows:-

For use on shore	8 breadths, i.e. 12 ft. by 6 ft.
For use on shore when specially(ordered	4 breadths, i.e. 6 ft. by 3 ft. (12 breadths, i.e. 18 ft. by 9 ft.
For use on boats	3 breadths, i.e. 4'6" by 2'3"
For use on board ship	8 breadths, i.e. 12 ft. by 6 ft.

The flag to be used by His Majesty's Diplomatic Servants, Ministers Plenipotentiary, Charges d'Affaires, etc., whether on shore or embarked on boats or other vessels, is the Union, with the Royal Arms in the centre thereof, on a white shield, surrounded by a green garland.

The flag to be used by His Majesty's Consular Officers ashore, to distinguish their residences, is the Union, with the Tudor Crown in the centre thereof, on a white shield.

The flag to be used by His Majesty's Consular Officers, when embarked in boats or other vessels, is the Blue Ensign with the Royal Arms in the centre of the fly thereof - that is, in the centre of that part between the Union and the end of the flag. The Consular Blue Ensign, being a personal distinguishing flag, must in boats be flown at the bow, and not at the stern, which is the accepted position for the national colours. No further flag is necessary, but if for some special reason it is desired to fly a flag at the stern, this should be the Red Ensign. The Consular flag is hoisted in boats only and not in ships except when a salute is being given to the Consular Officer concerned, when it is hoisted at the fore.

The distinguishing Flags to be used by Diplomatic and Consular Officers when afloat were approved by Order in Council of August 7, 1869, see below.

ORDER IN COUNCIL, RESPECTING UNION JACKS AND OTHER FLAGS DISPLAYED BY BRITISH DIPLOMATIC,CONSULAR AND OTHER AUTHORITIES, August 7, 1869.

WHEREAS there was this day read at the Board, a memorial from the Right Honourable the Lords Commissioners of the Admiralty, dated the 31st July, 1869, in the words following, viz:-

"The Union Jack having been established by your Majesty's Regulations for the Naval Service as the distinguishing flag to be borne by the Admiral of the Fleet; and whereas great inconvenience has at times been experienced by the Union Jack having been carried in boats and other vessels by Governors of Colonies, Military Authorities, Diplomatic Officers, and Consular Agents, when embarked, we have deemed it expedient to place ourselves in communication on this subject with the Commander-in-Chief, of your Majesty's Forces and the Principal Secretaries of State for Foreign Affairs, for the Colonies and for War, and with their concurrence we most humbly submit that your Majesty may be graciously pleased by your Order in Council to prescribe and direct that in future the Union Jack to be displayed by the military branch of your Majesty's service on such occasions shall bear in the centre thereof, as a distinguishing mark,

the ....

the Royal initial, surrounded by a garland on a blue shield and surmounted by the Crown; that the Union Jack to be used by your Majesty's diplomatic servants, Ministers Plenipotentiary, Charges d'Affaires, etc., shall bear the Royal Arms in the centre thereof, on a white shield; whilst Consuls and Consular Agents, etc., shall be limited to the use of the blue ensign with the Royal Arms in the fly thereof; we further submit that Governors of your Majesty's dominions in foreign parts, and Governors of all ranks and denominations administering the Governments of British colonies and dependencies, be authorised to fly the Union Jack, with the arms or badge of the colony emblazoned in the centre thereof.

"A drawing of the Union Jack, with the proposed distinguishing device, is transmitted herewith for your Majesty's approval".

Her Majesty, having taken the said memorial into consideration, was pleased, by and with the advice of her Privy Council, to approve of what is therein proposed; and the Right Honourable the Lords Commissioners of the Admiralty, the Right Honourable the Earl of Clarendon, the Right Honourable the Earl Granville, the Most Noble the Duke of Argyll, and the Right Honourable Edward Cardwell, are to give the necessary directions herein accordingly.

NOTE: British subjects resident abroad are at liberty to fly their National flag, the Union Jack, on land, unless the Municipal law of the foreign State in which they reside prohibits the use of foreign flags.

A STATEMENT OF THE DIMENSIONS OF FLAGS GENERALLY, WITH CERTAIN EXCEPTIONS.

The practice has been, in regard to the dimensions of Flags generally, to make the length twice the breadth at the head. The following appear to be exceptions to this rule:-

BRITISH FLAGS

Description and dimensions.	
Admirals	Length is 1½ times breadth.

For Foreign Flags, see the Plates showing designs.

GENERALLY THE PROPORTIONS OF THE SEVERAL PARTS OF THE UNDERMENTIONED FLAGS WILL BE AS FOLLOWS:

Description		The Width of the several Crosses.	Proportions generally in the Union Flag	Dimensions in a Union Flag of 10 Breadths as an example (A)	
Of Flags	Of Cross			ft.	ins
		(a) The red of the St.George's Cross to be	1/5th the width of the Flag.	1	6
UNION FLAGS	St.George Cross.	(b) The white border to the St.George's Cross to be	1/15th the width of the Flag, or 1/3rd the red of the St. George's Cross	0	6

NOTE (A) - A Flag of 10 Breadths measures 7 ft. 6 ins. in width by 15 ft. in length.

Description		The width of the several Crosses	Proportions generally in the Union Flag	Dimensions in a Union Flag of 10 Breadths as an example (A)	
Of Flags	Of Cross			ft.	ins.
		(c) The red of the St.Patrick's Cross to be	1/15th the width of the Flag, or 1/3rd the red of the St.George Cross.	0	6
UNION FLAGS	(B)St. Andrew's & St.Patrick's	(d) The narrow white border of the St.Patrick's Cross to be	1/30th the width of the Flag or 1/6th the red of the St.George Cross	0	3
		(e) The broad white of the St.Andrew's Cross to be	1/10th the width of the Flag, or ½ the red of St. George's Cross (or equal to the red of the St.Patrick's Cross together with one of its narrow white borders.)	0	9

(Continued)

GENERALLY THE PROPORTIONS OF THE SEVERAL PARTS OF THE UNDERMENTIONED FLAGS WILL BE AS FOLLOWS:

DESCRIPTION Of Flag	DESCRIPTION Of Cross.	Proportions generally
Ensigns, White	St.George's Cross to be	2/15ths the width of the Flag
	The widths of the Crosses in the Union to be	Determined by the proportions given above for the Union Flags.
Ensigns, Red & Blue	The Union Flag to be	In length half the length of the Flag, and in width half the width of the Flag.
	The widths of the Crosses in the Union to be	Determined by the proportions given above for the Union Flags.
Admiral's Flag	St.George's Cross to be	1/6th the width of the Flag
Pendants, Broad	-do-	1/6th the width of the Flag

Note (A)- A Flag of 10 Breadths measures 7 ft 6ins in width by 15ft in length.

(B)- As the Breadths of the Red and Narrow White stripes of the St. Patrick's and St. Andrew's Crosses are together equal to the Broad White of the St.Andrew's Cross, the centre line of these three parts, which will be one edge of the Red Cross, should form a diagonal to the Union Flag, observing that the Broad White should be on the upper part of the Cross in the quarters at the Head of the Union Flag, and on the lower part of the Cross in the quarters at the Fly.

DIMENSIONS OF THESE FLAGS, DETERMINED TO THE NEAREST ¼ OF AN INCH FROM THE FOREGOING PROPORTIONS TO BE AS FOLLOWS:

	St.Goege's Cross.		St.Andrew's St.Patrick's Crosses			No.of Yds. long.	Breadth at Head	Red Cross	
No.of Bread-ths.	Red	White	Red	Narrow White	Broad White			Length	Breadth
	ft ins	ft ins	ft ins	ft ins	ft ins		ft ins	ft ins	ft ins
18	2. 8½	0. 10¾	0. 10¾	0. 5½	1. 4¼	20	0. 4	4. 6	0. 1½
16	2. 4¾	0. 9½	0. 9½	0. 4¾	1. 2½	18	0. 4	4. 6	0. 1½
14	2. 1¼	0. 8½	0. 8½	0. 4¼	1. 0½	16	0. 4	4. 0	0. 1½
12	1. 9½	0. 7¼	0. 7¼	0. 3½	0. 10¾	14	0. 4	3. 6	0. 1½
10	1. 6	0. 6	0. 6	0. 3	0. 9	12	0. 4	3. 0	0. 1½
8	1. 2½	0. 4¾	0. 4¾	0. 2½	0. 7¼	10	0. 4	3. 0	0. 1
6	0. 10¾	0. 3½	0. 3½	0. 1¾	0. 5½	8	0. 4	2. 6	0. 1
5	0. 9	0. 3	0. 3	0. 1½	0. 4½	6	0. 4	2. 6	0. 1
4	0. 7¼	0. 2½	0. 2½	0. 1¼	0. 3½	4	0. 2½	2. 0	0. 1
3	0. 5½	0. 1¾	0. 1¾	0. 1	0. 2¾	3	0. 2½	1. 6	0. 1

27 119

ENSIGNS, WHITE.

o. of Breadths.	St. George's Cross in Ensign	UNION					
		Widths of Stripes in the Crosses					For inserting in these Ensigns will be as follows.
		St. George's Cross.		St. Andrew's and St. Patrick's Crosses.			
		Red	White	Red	Narrow White	Broad White	
	ft ins	ft ins	ft ins	ft ins	ft ins	ft ins	No. of Breadths
22	2. 3	1. 5	0. 5¾	0. 5¾	0. 2¾	0. 8½	9½
20	2. 0	1. 3½	0. 5¼	0. 5¼	0. 2½	0. 7¾	8.2/3
18	1.10	1. 2	0. 4½	0. 4½	0. 2½	0. 7	7¾
16	1. 7	1. 0½	0. 4¼	0. 4¼	0. 2	0. 6¼	7
14	1. 4¾	0.10¾	0. 3½	0. 3½	0. 1¾	0. 5½	6
12	1. 2½	0. 9¼	0. 3	0. 3	0. 1½	0. 4¾	5¼
10	1. 0	0. 7¾	0. 2½	0. 2½	0. 1¼	0. 4	4 1/3
8	0. 9½	0. 6¼	0. 2	0. 2	0. 1	0. 3¼	3½
6	0. 7¼	0. 4¾	0. 1½	0. 1½	0. 0¾	0. 2¼	2½
5	0. 6	0. 4	0. 1¼	0. 1¼	0. 0¾	0. 2	2
4	0. 4¾	0. 3	0. 1	0. 1	0. 0½	0. 1½	1¾
3	0. 3½	0. 2¼	0. 0¾	0. 0¾	0. 0½	0. 1¼	1¼

ADMIRAL'S FLAGS

Number of Breadths	Width of Red Cross	
	ft.	ins
18	2.	3
16	2.	0
14	1.	9
12	1.	6
10	1.	3
8	1.	0
6	0.	9
4	0.	6
3	0.	4

BROAD PENDANTS

Number of Breadths	Width of Red Cross (Parallel)		Breadth of the Pendants at the Points of the Fly		Length of the Points at the Fly to the Crutch.	
	ft.	ins	ft.	ins	ft.	ins
18	2.	3	8.	0	9.	0
16	2.	0	7.	1	8.	0
14	1.	9	6.	3	7.	0
12	1.	6	5.	4	6.	0
10	1.	3	4.	6	5.	0
8	1.	0	3.	7	4.	0
6	0.	9	2.	9	3.	0
5	0.	7½	2.	3	2.	6
4	0.	6	1.	10	2.	0
3	0.	4	1.	4	1.	6

FLAGS FOR MILITARY, DIPLOMATIC, AND CONSULAR OFFICERS, GOVERNORS OF COLONIES, AND COLONIAL VESSELS, ETC.

The Badges of these Flags are to be of the following dimensions, viz:- For a Flag 12 ft x 6 ft., the diameter to be 2 ft 8 ins., and for a Jack 6 ft x 6 ft flown by vessels belonging to Public Offices the diameter to be 1 ft 6 ins.

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The width of the several Crosses	Proportion generally in the Union Flag	Precise Dimensions in a Union Flag of 10 Breadths*	
		ft.	ins
(a) The Red of the St. George's Cross to be	1/5th the width of the Flag	1	6
(b) The White Border to the St.George's Cross to be	1/15th the width of the Flag or 1/3rd the Red of the St. George's Cross.	0	6
(c) The Red of the St. Patrick's Cross to be	1/15th the width of the Flag or 1/3rd the Red of the St. George's Cross.	0	6
(d) The Narrow White Border of the St.Patrick's Cross to be	1/30th the width of the Flag or 1/6th the Red of the St. George's Cross.	0	3
(e) The Broad White of the St. Andrew's Cross to be	1/10th the width of the Flag or ½ the Red of the St.George's Cross, or equal to the Red of the St. Patrick's Cross, together with one of its narrow White Borders.	0	9

* A Breadth signifies a Breadth of Bunting, viz. 9 ins, and thus a Flag of 10 Breadths measures 15 ft. long by 7 ft. 6 ins. broad.

ANNEXURE IV

(Item 2)

THE NATIONAL FLAG OF THE UNITED STATES OF AMERICA.

The national flag of the United States has 13 horizontal stripes, seven red and six white with a red strip at the top and bottom and a union or canton of blue in the upper quarter next to the staff and extending down to the bottom of the 4th red stripe. The union contains 48, five pointed stars, one for each state arranged in 6 rows of 8 stars each.

The proportions of the flag were fixed by Executive order of President Taft on Oct. 29, 1912 as follows :

Hoist (width) of the flag	... 1
Fly (length) of the flag	... 1.9
Hoist (width) of the union	... 7/13
Fly (length) of the union	... .076
Width of each stripe	... 1/13
Diameter of each star	... .0616

The President has a flag of his own which is displayed from the main of a ship in which he embarks. It is blue with the coat of arms of the United States in its proper colours at the centre.

The flag of the Secretary of the Navy is also blue with a white fouled anchor in the centre surrounded by four white stars.

Three sizes of the national flags are displayed by the army. The garrison flag 20 x 38 ft., the port flag 10 x 18 ft. each made of woolen bunting. The third size, a storm flag of cotton is 5 x 9½ ft. As the army displays the flag from sunrise to sunset a storm flag became necessary. The national anthem is played when the flag is lowered.

M/

S.No.6 D. 416/49-Pb 22/1/49. (122)

30

INDIAN STANDARDS INSTITUTION

Grams : Indstand
New Delhi • Phones : 2623
7046/268

• 11 BLOCK, Old Secretariat Building,
• ~~RAISINA ROAD~~
• NEW DELHI, 21 January 1949.

Your Ref :
Our Ref : TDC 8/1A
Subject :

Dear Mr. Raman,

[illegible]

I thank you for permitting us to hold the meeting of the Sectional Committee for the National Flag of India on 28 January 1949 at 10.30 A.M. in your Room in South Block.

The following are expected to be present for the meeting:-

1. Mr. Bharat Ram
2. Mr. G.E. Longdin
3. Mr. C.S. Ramanathan
4. Dr. G.M. Nabar
5. Mr. S.K. Gupta
6. Mr. C.P. Halkatti
7. Mr. T. Balakrishnan

Will you kindly arrange to obtain passes for the first five gentlemen and send them on to me for distribution to them.

The agenda for the meeting is being sent to you separately.

Yours sincerely,

CP Halkatti

(C.P.HALKATTI)
ASSISTANT DIRECTOR(TEXTILES)

M.V. Raman, Esq.,
Under Secretary to the Govt. of India,
Ministry of Home Affairs,
NEW DELHI.

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Received free
passes
Thanks

22/1/49

S. No. 7

THE INDIAN STANDARDS INSTITUTION (ISI)

It may please be noted that the Office of the Indian Standards Institution has been shifted from its present premises in New Delhi to Block No. 11, Old Secretariat, Delhi 2 from 22 January 1949. Its telegraphic address will now be "INDSTAND DELHI"

B.L. Bhatia
(B.L. BHATIA)
Secretary (Administration)

22 January 1949.

Please keep this on the National Flag file ~~[illegible]~~ re: meeting of the I.S.I.

AVRaman
5.2.49

Dublic

S.No.8

(124)

32

D.O.No.41/3/49-Public.
Ministry of Home Affairs,
New Delhi, 5th Feb., 1949.

My Dear Bhatia,

As you may be aware we held a meeting of your Institute regarding National Flag of India in this Ministry on the 28th January 1949 in my room. We arranged for supply of tea to members a bill for Rs.10/- in respect of which is herewith enclosed. I shall be grateful if payment for the same be arranged early. Mr. Halkatti wanted me to pass the bill to your Institute.

Pl acknowledge receipt.

Yours sincerely,

(A.V.Raman)
UNDER SECRETARY.

ISSUED
On 7/2
Initial
R. [illegible]

Shri B.L. Bhatia,
Secretary (Administration),
Indian Standards Institute,
Block 11, Old Secretariat,
DELHI.

122

S. No. 9

(125)

33

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand
New Delhi
Phones : 2623 6105 and 43001/262
7046/268
• P BLOCK
• RAISINA ROAD
• NEW DELHI

Block 11,
Old Secretariat,
Delhi 2, 14 Feb 49.

Your Ref :

Our Ref : TDC 8/2A.

Subject : First meeting of the Sectional Committee for National Flag of India (TDC 8).

Chairman and members of TDC 8.

Dear Sir,

I have pleasure in enclosing a copy of the proceedings of the first meeting of TDC 8 held on 28 January 1949, in New Delhi.

Yours faithfully,

CPHalkatti

(C.P. HALKATTI),
Assistant Director (Textiles).

Encl: 1.

ARM.

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Mr. A. V. Raman

INDIAN STANDARDS INSTITUTION(ISI).

PROCEEDINGS
of the
FIRST MEETING
of the
Sectional Committee for National Flag of India(TDC 8)
held in
Room No.8A, South Block, Central Secretariat, New Delhi
at
10.30 hours on Friday, 28 January 1949.

PRESENT:

Members:	1.	Mr. C.S. Ramanathan	- Textile Adviser to the Controller of Stores Development, Directorate of Technical Development, Army Headquarters India, New Delhi.
	2.	Mr. G.E. Longdin	- The New Egerton Woollen Mills, Dhariwal (East Punjab).
	3.	Mr. A.V. Raman	- Under Secretary, Ministry of Home Affairs, Government of India, New Delhi.
	4.	Dr. G.M. Nabar	- Representing Dr. K. Venkataraman, Department of Chemical Technology, Bombay University, Matunga, Bombay 19.
	5.	Mr. S.K. Gupta	- Deputy Director of Inspection (Textiles), D.G. I & S., Block No.2, Shahjehan Road, New Delhi.
Staff:	5.	Mr.C.P.Halkatti	- Assistant Director(Textiles), ISI.
	6.	Mr.T.Balakrishnan	- Technical Assistant, ISI.

Item 0. **GENERAL:**

In the absence of the Chairman, Mr. Bharat Ram, Mr.C.S.Ramanathan was proposed to the Chair and the proceedings were conducted under his Chairmanship.

0.1 Welcome by the Chairman. Mr. Ramanathan said that owing to some urgent work Mr. Bharat Ram, the Chairman of the Sectional Committee, could not attend the meeting and therefore the onerous duty of Chairmanship had devolved on him. In welcoming the members, Mr. Ramanathan said, "It is highly imperative that the National Flag of India which is the emblem of the Nation should be standardized and uniformity maintained in the supplies as well as in the use of it. The Indian Standards Institution thought it well to take up the matter. The Army Headquarters were pleased to furnish drawings and such other specifications in their possession which were required for the preparation of the specification of the National Flag of India. We have now met here to consider the various technical details connected with this specification and I hope, the work will be completed as early as possible."

Item 1. ......

Item 1. Composition of the Sectional Committee TDC 8.

1.1 The composition of TDC 8 as approved by the Textile Division Council was noted and considered adequate.

Item 2. Consideration of the draft specification for the National Flag of India.

2.1 The draft specification prepared by the staff of the ISI was considered in detail.

2.1.0 Mr. Halkatti at the outset explained how this draft specification was brought out. Some time ago, he said, Col. Archer, Controller of Stores Development, Army Headquarters, a member of the Textile Division Council (TDC) representing the Defence Ministry, suggested that the Indian Standards Institution might take up the standardization of the National Flag of India on the basis of the specification already drawn up by the Army Headquarters. This suggestion was approved by the Executive Committee (EC) and TDC of ISI. The Defence Department was pleased to furnish the required drawings and other details of basic materials. With these as the basis and in consultation with Mr. Ramanathan, the draft specification was prepared. He informed the members that quality particulars of cotton bunting had been adjusted to suit the requirements of the Government Textile Control Order.

He also mentioned that the High Commissioner for the United Kingdom in India and the USA Embassy in India were contacted to procure specifications of the Union Jack and the National Flag of the USA. Though certain information was furnished by those offices, it was understood that specifications as such, did not exist for the National Flags of those two countries.

2.2 In reply to a question from Mr. Raman as to whether there should be a central source of supply, Mr. Ramanathan said that as far as Government Departments were concerned, the central source of supply was the Ordnance Factory at Shahjahanpur, but it would be difficult to have a central source of supply for catering the needs of public bodies and private individuals.

2.2.1 The Committee DECIDED not to pursue the matter.

2.3 Mr. Ramanathan stated that deep saffron and dark green mentioned in paragraph 2.1 of the Specification were special shades not falling under any international colour standards and as such, he suggested that those shades should be given new nomenclatures viz. India Saffron and India Green.

2.3.1 This was AGREED to. It was also AGREED to include spectrophotometric values of colour and shade in the specification.

2.4 On Mr. Longdin's suggestion the word "superimposed" was added after the word "embroidered" in the last sentence of para 2.1 and a further sentence "The superimposed cloth shall be the same as that of the body material" was added.

2.5 Mr. Ramanathan suggested that a set of Standard Flags should be manufactured according to the specification and kept in the custody of the Indian Standards Institution as the sealed samples for the guidance of the manufacturers.

2.5.1 Mr. Halkatti said that as long as full details were incorporated in a specification the need for a sealed sample manufactured according to specification might not arise.

2.5.2 Mr. Longdin supported the suggestion of Mr. Ramanathan and said that even though a specification existed, a sealed sample was quite necessary for the guidance of manufacturers as far as

workmanship ....

workmanship, colours and shades were concerned.

2.5.3 The Committee was unanimous in their opinion that a sealed sample conforming to the specification should be kept in the custody of the ISI. Therefore, it was DECIDED to add "and in conformity with the sealed sample held in the custody of the Indian Standards Institution" after the words "Appendix I" in the first sentence of para 2.2.

2.6 Minimum number of stitches per inch was fixed as 10 for stitching worsted and cotton bunting and 6 for duck cotton grey. Mr. Ramanathan promised to advise on the number of minimum stitches per inch for silk fabric.

2.7 The Committee then considered the manufacturing details of various materials used for the Flag.

2.7.1 Mr. S.K. Gupta was of opinion that sewing cotton 6/36s, though suitable for stitching worsted and cotton bunting, was unsuitable for silk fabric and preferred the use of a sewing silk for stitching silk fabrics.

2.7.2 Mr. Ramanathan promised to furnish the Committee a suitable specification for sewing silk.

2.8 Some discussion arose on the quality particulars of worsted bunting. Mr. Longdin volunteered to manufacture a sample of the worsted bunting which could conveniently be manufactured by all the mills manufacturing worsted cloth in India, and forward it to the Committee with the manufacturing details.

2.8.1 The Committee DECIDED to incorporate the manufacturing details in the specification if the sample was found satisfactory.

2.9 Mr. Longdin proposed that provision for the shrinkage of cloth should also be made in the specification. Dr. Nabar in supporting the proposal, said that for cloths required for the manufacture of the Flag, only relaxation shrinkage need be specified.

2.9.1 After some discussion it was DECIDED to allow a maximum of 2 percent relaxation shrinkage in cloth both warpway and weftway.

2.10 Mr. Ramanathan felt that the terms Silk and Line Hemp should be redesignated as "Pure Silk" and "Cordage Hemp", to be more precise.

2.10.1 This was AGREED to. Mr. Ramanathan also agreed to supply the manufacturing particulars of Cordage Hemp 1 inch and 1¼ inches circumference.

2.11 The question of the period of conditioning of samples was raised by Mr. Longdin. He said that textile samples requiring conditioning before testing, should be conditioned for 48 hours under standard conditions to ensure moisture equilibrium.

2.11.1 Mr. Halkatti was of opinion that duration of time for a material to attain moisture equilibrium varied according to the nature and construction of different textile materials and that the time factor might be left to the discretion of the testing authorities to save time in cases where materials could reach moisture equilibrium much earlier than 48 hours.

2.11.2 Mr. Ramanathan said that though most textile fabrics attained moisture equilibrium within 24 hours, materials like cordages etc. took longer period to attain moisture equilibrium and therefore, as a safety margin the period of conditioning should be fixed as 48 hours.

2.11.3 This was ACCEPTED by the Committee.

2.12 ....

2.12 After examining the drawing given in Appendix I, the Committee DECIDED that the drawing should contain only details of Flag including motor car flag, spoke, loop of cordage hemp, toggle wood position, wire brass staff and sections of sleeve, seam and hem.

2.13 The Committee accepted the proposal of Mr. Ramanathan to delete the "method of test for lea tensile strength" (item 3.1) from Appendix V. Few minor changes in the wording of the specification were also made by the Committee.

2.14 Having agreed to all other details of the specification and its appendices it was DECIDED to redraft the specification in the light of the discussions and circulate the draft to the members for their approval.

After thanking Mr. Raman for affording facilities for holding the meeting in his room the meeting concluded.

Dy. 1214/49-M
dt 21/2

S. No. 10

130

38

INDIAN STANDARDS INSTITUTION

Grams : Indstand
~~New~~ Delhi

Phones : ~~2623~~ ~~7046/268~~ 6105 & 5419

~~P~~ BLOCK 11, Old Secretariat,
~~RAISINA ROAD~~
~~NEW~~ DELHI, 18 February 1949.

Your Ref :

Our Ref :

Subject : SIZE FOR THE SEALED SAMPLES.

All Members of the Sectional Committee
for National Flag of India (TDC 8).

Dear Sir,

I shall be glad if you kindly let me know whether the size 3' x 2' for the sealed samples of the National Flag has your approval. As this point was not discussed in detail at the last meeting, I shall be obliged to have your approval for or comments on the same.

24/2

Yours faithfully,

C.P. Halkatti

(C.P. HALKATTI)
ASSISTANT DIRECTOR(TEXTILES).

'SS'

A. V. Raman Esq.

128

S. No. 4

(131) 39

No.F.41/3/49-Public.
Government of India.
Ministry of Home Affairs.
New Delhi, the 28th March 1949.

To

ISSUED
29/3
1132

The Assistant Director (Textiles)
(Mr. C.P. Halkatti)
Indian Standard Institution,
11 Old Secretariat, **Delhi.**

Subject: Indian National Flag-
Size for the Sealed Samples.

Dear Sir,

p. 38 Cor.

Reference your letter dated the 18th February 1949 on the above subject.

We agree to sealed samples being of size 3' x 2'.

Yours faithfully,

Under Secretary to the Govt. of India.

Pl submit to
me after my
return on 2.4.49
28/3

129

S-5 (Small)
MGIPC—S2—418(Genl)-MFP—(6767/A/M-185)—1-6-48—60,000 Pads.

132

DEPARTMENT/OFFICE.

File No.
Serial No.

Draft Letter / Memorandum / Telegram

No.

Dated

1. Date of despatch.
2. List of enclosures.

130

S. NO. 12

(133) 40/

~~DEPARTMENT/OFFICE.~~
MINISTRY OF HOME AFFAIRS. File No.
Serial No.

Issue
5/5

D. O. Letter
Draft ~~Memorandum~~
~~Telegram~~

1. Date of despatch.
2. List of enclosures.

No. F.41/3/49-Public. ~~Dated~~ 6th May '49

Dear Shri Halkatti,

Will you please refer to your ref. No. TDC. 8/2A, dated 14.2.49 forwarding minutes of the first meeting of the TDC 8 held on 28.1.49 regarding National Flag? Has the specification since been revised?

Yours sincerely,

Sd. A.V. Raman.
U.S. (PB).

✓ ~~p. 33/Gr.~~
3955
5/5
Typed by Vidhan
Compared by

ISSUED
On 6/5
Initial

Shri C.P. Halkatti,
Assistant Director,
Indian Standard Institution,
Block 11, Old Sectt. Delhi.

131

D.3354/49-Pl.
dt. 12/5 — S. No. 13

41

134

INDIAN STANDARDS INSTITUTION

Grams : Indstand
Delhi
Phones : 6105
5419
BLOCK II
OLD SECRETARIAT
DELHI 2, INDIA

Your Ref :
Our Ref : TDC 8/2A

11 May 1949.

Subject : National Flag of India.

Dear Mr. Raman,

p. 40/Corr.

Thank you for your letter No.F.41/3/49-Public dated 6 May 1949. The draft specification for National Flag has not yet been finalised as Mr. Longdin of Dhariwal Woollen Mills has not yet sent the woollen bunting cloth after manufacturing according to the particulars suggested by our Committee. I have been in touch with Mr. Longdin and he has informed me that it will be ready shortly. As soon as the particulars on those samples are obtained the same will be incorporated in the specification and put before the National Flag Sectional Committee for finalization. However, we are trying our best to expedite the matter.

P/p on 12/5/49

RDS 12/5

With kind regards,

Yours sincerely,

C.P. Halkatti

(C.P. HALKATTI)

A.V.Raman, Esq.,
Under Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

132

'SS'

135

DEPARTMENT/OFFICE.

File No. S. No. 14
Serial No. 42

Issue 16/6

D.O. Letter
Draft Memorandum
Telegram

1. Date of despatch.
2. List of enclosures.

RECEIVED IN THE R. & I.
On 16/6
Case No. 1203
Typed by [illegible] 17
Compared by [illegible]

ISSUE
13/6

No. F-41/3/49-Pr Dated 7/6/1949.

Dear Shri Halkatti.

Will you please refer to your D.O. letter No. TDC 8/2A dated the 11.5.49 regarding Indian National Flag. We should be grateful to know ~~when a reply thereto may be expected.~~ how the matter stands at present.

Yours sincerely.

ah
U.S (P.B)

Shri C. P. Halkatti
Asstt. Dir: Indian Standard
Institution, Block No 11, Old
Secretariat Delhi

133

S-5 (Small)
B. P.—6767/A/S-344—10-11-42—50,000 pads.

Dy. No! - 4382/49/Pb-
Dt. 23/6/49.

S. No. 15

136

43

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419
• BLOCK II
• OLD SECRETARIAT
• DELHI 2, INDIA

Your Ref :
Our Ref : TDC 8/2A

20 June 1949.

Subject : Second meeting of the Sectional Committee for National Flag of India (TDC 8)

Chairman and all members of TDC 8.

-p.43/Cor.

Dear Sir,

I have pleasure in informing you that the second meeting of the Sectional Committee for National Flag of India will be held at 10.30 A.M. on Friday 8 July 1949, in Delhi.

The exact place of the meeting will be intimated along with the agenda in due course.

The meeting is expected to terminate on the same day. As the draft specification for National Flag of India is expected to be finalised in this meeting, I hope you will kindly make it convenient to attend.

Yours faithfully,

Balakrishnan

for Asstt. Director(Text

TRT.

File here
A V Raman
22/6/49

Public

RDS
23/6

* p.42/Cor. * Mr. A. V. Raman. This disposes his D.O. No. F. 41/3/47 - Pb., dt. 17. 6. 49.

S.No.16 D 4650/49/Admn. (137)
Dt. 4.7.49.

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419
• BLOCK 11
• OLD SECRETARIAT
• DELHI 2, INDIA

44

Your Ref : --
Our Ref : TDC 8/2A

2 July 1949.

Subject : Second meeting of National Flag Sectional Committee TDC 8.

All members of TDC 8.

Dear Sir, — D.431/Cor.

Kindly refer to my circular letter of even number dated 20 June 1949. As the date, 8 July, was is not convenient to the Chairman and some of the members, the second meeting of the National Flag of India Sectional Committee (TDC 8) has been postponed to Thursday 21 July 1949.

The meeting will be held in the ISI Committee Room, Block 11, Old Secretariat, Delhi 2.

It is hoped that it will be convenient for you to attend the meeting.

Pp please
am 4/7/49
Publish
RDS 4/7

Yours faithfully,

C.P. Halkatti
(C.P.HALKATTI)
ASSISTANT DIRECTOR(TEXTILES)

H... with pl.
RDS 4/7
U.S.(Pl.)

A.V. Raman, Esq.

'SS'

S.117)

(138)

45

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419 • BLOCK II • OLD SECRETARIAT • DELHI 2, INDIA

Your Ref :
Our Ref : TDC 8/2A

11 July 1949.

Subject : SECOND MEETING OF NATIONAL FLAG SECTIONAL COMMITTEE (TDC 8)

All Members of TDC 8.

p.43/Cor

Dear Sir,

p.44/Cor.

In continuation of my letter dated 2 July 1949, I enclose a copy of Agenda for the second meeting of the Sectional Committee for National Flag of India to be held at 10.30 A.M. on Thursday 21 July 1949. Please note that the meeting will be held in the office of Mr. A.V. Raman, Under Secretary, Ministry of Home Affairs at 8A South Block, Central Secretariat, New Delhi.

I hope you will kindly attend the meeting.

Yours faithfully,

Balakrishnan

TRT. for Asstt. Director (Textiles)

12/7/49

Encl:1.

Shri A.V. Raman,

# AGENDA
for the
SECOND MEETING
of the
SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA(TDC 8)
to be held
in Room No. 8A-South Block, Central Secretariat,
New Delhi,
at 10.30 A.M. on Thursday 21 July 1949.

Item 0 GENERAL

0.1 Opening speech by the Chairman.

Item 1 SUMMARY OF WORK

1.1 During the period February-July 1949, the ISI directorate pursued the directives given by TDC 8 in its first meeting held on 28 January 1949.

1.1.1 Samples of cotton bunting, worsted bunting and silk were manufactured according to the particulars suggested by TDC 8 and supplied by Mr. Bharat Ram, Mr. G.E. Longdin and Mr. Dara H. Kooka of the Chhoi Silk Mills, Bombay. These samples were sent to the Chief Superintendent Development Textiles & Clothing, Kanpur for testing and the test results have been included in the draft specification. Another batch of samples were sent to Dr. G.M. Nabar for dyeing and the dyed samples are awaited.

1.2 A circular was issued to all members of TDC 8, suggesting the size for sealed samples of the flag as 3 ft x 2 ft. The Chairman of TDC 8 and two other members agreed to the proposed size.

Item 2 DRAFT SPECIFICATION

2.1 The draft Indian Standard Specification for the National Flag of India, as modified incorporating test figures and other particulars, is given in Annexure I for approval.

2.1.1 Dyed samples are expected to be tabled by Dr. Nabar at the meeting. These dyed samples are proposed to be sent to the Kanpur Laboratory for determining the spectro-photometric values of colour for incorporation in the specification later.

2.2 The Rules & Regulations of the ISI provide that where the subject matter of a draft specification is considered to be of non-controversial nature or where the need for the standard is considered urgent, the Division Council, on the recommendation of the Sectional Committee concerned, may dispense with the circulation of the draft for three months in specific cases.

2.2.1 TDC 8 may consider desirability of recommending to the Textile Division Council to dispense with the circulation of the draft specification.

Item 3 ANY OTHER BUSINESS

KL.

ANNEXURE I

(Item 2)

INDIAN STANDARDS INSTITUTION(ISI)

DRAFT INDIAN STANDARD SPECIFICATION FOR THE NATIONAL FLAG OF INDIA

----

0. FOREWORD

0.1 The Hon'ble Pandit Jawaharlal Nehru presented to the Constituent Assembly of India on 22 July 1947, two flags, one of silk and the other of cotton khadi, specially designed and manufactured for adoption as the National Flag of India. He moved the following Resolution:

> "Resolved that the National Flag of India shall be a **horizontal** tricolour of deep saffron (kesari), white, and dark green in equal proportion. In the centre of the white band, there shall be a Wheel in navy blue to represent the Charkha. The design of the Wheel shall be that of the Wheel (Chakra) which appears on the abacus of the Sarnath Lion Capital of Asoka.
>
> "The diameter of the Wheel shall approximate to the width of the white band.
>
> "The ratio of the width to the length of the Flag shall ordinarily be 2:3."
>
> The motion was adopted, the whole assembly standing.

0.2 The Resolution passed in the Constituent Assembly on 22 July 1947 did not furnish full details regarding the quality of the cloth, and other particulars required for the manufacture of flags. Hence the necessity arose for the preparation of a self-contained specification for the National Flag of India.

0.3 The Army Headquarters (India), who had drawn up specifications for the National Flag for the use of the Army, suggested to the Indian Standards Institution to issue a specification for the National Flag on the basis of the one drawn up by them.

1. SCOPE

1.1 This specification covers the essential requirements of the National Flag of India.

2. GENERAL REQUIREMENTS

2.1 The National Flag of India shall strictly comply with the terms of this specification.

amendment suggested

2.2 The ratio of width to length of the Flag shall **ordinarily** be 2:3, but this could be suitably altered to any other ratio to comply with special requirements.

2.3.....

2.3 The Flag shall be a horizontal tricolour, of India saffron (kesari), white and India green in equal proportion. The top piece shall be of India saffron, the middle white and the bottom India green.

2.4 There shall be a wheel with 24 spokes in navy blue colour in the centre of the white piece. The wheel shall be painted, printed, superimposed or embroidered on both sides of the Flag. The superimposed cloth shall be of the same material as that of the body.

2.5 The design and make up of the Flag shall be in accordance with Figure 1 and in conformity with the sealed sample held in the custody of the Indian Standards Institution in general.

2.5.1 The design and make up of the Motor Car Flag shall be in accordance with Figure 2. [The fabric used for the Flag shall be of two thicknesses∠ indicated therein] amended to bring out intention clearly

∠as

2.6 The Flag shall be manufactured either from worsted bunting, or cotton bunting or natural or reeled silk fabric.

2.7 Duck cotton grey shall be used for the sleeve of the Flag.

2.8 Sewing cotton shall be used for stitching worsted and cotton bunting and shall match the shade of the bunting on which it is stitched. The number of stitches shall be a minimum of 10 per in. (4 per cm).

2.8.1 The sewing silk shall be used for stitching silk fabric and shall match the shade of the cloth on which it is stitched. The number of stitches shall be a minimum of 12 per in. (5 per cm).

alternative material suggested amendment suggested

2.8.2 The thread flax shall be used for stitching the Duck cotton sleeve.

3. MATERIALS

3.1 Worsted bunting. Bunting shall be free from flaws and manufactured from evenly spun and folded worsted yarn. The bunting shall be clean, scoured free from grease, soap, filling or any other foreign matter which might have been used to give fictitious weight or firmness to the fabric.

3.1.1 Quality particulars. Bunting shall be of plain weave and shall conform to the following particulars:

Count		Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq yd (g/sq m)	Tensile strength	
Warp	Weft				Warp lb(kg)	Weft lb(kg)
2/22^s	2/22^s	26(10)	26(10)	5±0.5 (160±16)	70(32)	70(32)

Counts, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix A.

3.1.1.1 Dyeing. The bunting shall be piece dyed with dyes necessary to produce the required colour and shade, which shall be fast to light and washing. The colour values shall conform to the values given in Appendix B.

The dyed fabric shall have at least class 6 light fastness when tested according to the method described in Appendix C.

The dyed fabric shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix D.

3.1.1.2 Shrinkage. The shrinkage in fabric in warpway or weftway shall not exceed 2 percent when tested according to the method described in Appendix E.

Separate specification to be prepared for (a) Khadi (or handspun yarn) (b) Cambric

3.2 Cotton bunting. Bunting shall be free from flaws and any other defect. The yarn shall be evenly spun and twisted hard.

3.2.1 Quality particulars. The dyed or bleached bunting shall be of plain weave and shall conform to the following particulars:

Count Warp	Count Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq yd (g/sq m)	Tensile strength Warp lb(kg)	Tensile strength Weft lb(kg)
2/20^s	10^s	38(15)	31(12)	5.25±0.5 (168±16)	110(50)	60(27)

Counts, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix A.

3.2.1.1 Dyeing. The bunting shall be piece dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing. The colour value shall conform to the values given in Appendix B.

The dyed fabric shall have at least class 6 light fastness when tested according to the method described in Appendix C.

The dyed fabric shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix D.

3.2.1.2 Shrinkage. The shrinkage in fabric in warpway or weftway shall not exceed 2 percent when tested according to the method described in Appendix E.

3.3 Pure silk. Pure silk fabric shall be free from weaving flaws and any other defect. The fabric shall not be weighted.

3.3.1 Quality particulars. Pure silk fabric shall be of plain weave and shall conform to the following particulars:

Count (in deniers) Warp	Count (in deniers) Weft	Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq yd (g/sq m)	Tensile strength Warp lb(kg)	Tensile strength Weft lb(kg)
40^s (2 folds)	54^s (2 folds)	127(50)	93(36)	1.47±0.1 (50±3)	(To be incorporated)	

Counts, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix A.

3.3.1.1.....

3.3.1.1 Dyeing. The fabric shall be piece dyed with dyes necessary to produce the required colour and shade, which shall be fast to light and washing. The colour values shall conform to the values given in Appendix B.

The dyed fabric shall have at least class 6 light fastness when tested according to the method described in Appendix C.

The dyed fabric shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix D.

3.3.1.2 Shrinkage. The shrinkage in fabric in warpway or weftway shall not exceed 2 percent when tested according to the method described in Appendix E.

3.4 Duck cotton. The duck shall be in loom state, without dressing. The single and folded yarns shall be twisted uniformly. The duck shall be free from weaving flaws and any other defect.

3.4.1 Quality particulars. The duck shall be of plain weave and shall conform to the following particulars:

Count		Ends per in. (per cm)	Picks per in. (per cm)	Weight oz/sq yd (g/sq m)	Tensile strength	
Warp	Weft				Warp lb(kg)	Weft lb(kg)
$3/16^s$	$3/16^s$	42(17)	32(13)	12±0.5 (408±16)	240(109)	230(104)

Counts, ends and picks per unit, weight per unit area and tensile strength shall be determined by the methods described in Appendix A.

3.5 Sewing cotton. The sewing cotton shall be manufactured from carded or combed Egyptian cotton. The sewing shall be well spun, evenly twisted, free from knots, short lengths and other defects.

3.5.1 Quality particulars. The sewing cotton shall conform to the following particulars:

Count	Direction of Twist	Length of finished thread per lb(per kg)	Single thread Tensile Strength lb(kg)
$6/36^s$	36Z/2Z/3S	4500 yd(9070 m)	5(2.25)

Note: Single yarns of 36^s Count shall first be twisted in 'Z' direction. Two such single yarns of 36s shall then be twisted in 'Z' direction, and finally three such two-fold yarns shall be twisted in 'S' direction.

The count and single thread tensile strength shall be determined by methods described in Appendix F.

3.5.1.1.....

3.5.1.1 Dyeing. The sewing cotton shall be dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

The dyed yarn shall have at least class 6 light fastness when tested according to the method described in Appendix C.

The dyed yarn shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix D.

3.5.1.2 Pfoofing. The sewing cotton shall be proofed against mildew.

Sewing cotton shall not show any growth of fungi when tested according to the method given in Appendix G.

3.6 Sewing silk. The sewing silk shall be manufactured from pure thrown silk. The sewing shall be well spun, evenly twisted, free from knots, short lengths and other defects.

3.6.1 Quality particulars. The sewing silk shall conform to the following particulars:

Count (Deniers)	Direction of twist.	Length of finished thread. per lb (per kg)	Single thread Tensile strength lb(kg)
3/372	372S/3Z	12000 yd (10973 m)	3(1.4)

The count and single thread tensile strength shall be determined by methods described in Appendix F.

3.6.1.1 Dyeing. The sewing silk shall be dyed with dyes necessary to produce the required colour and shade which shall be fast to light and washing.

The dyed yarn shall have at least class 6 light fastness when tested according to the method described in Appendix C.

The dyed yarn shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix D.

alternative ~~be~~ suggested.

3.7 Thread flax. Thread flax shall be manufactured from good quality flax. It shall be well spun, evenly twisted, free from knots, short lengths and other defects.

3.7.1 Quality particulars. The thread flax shall conform to the following particulars:

Cord	Direction of twist.	Length yd (m)	Weight gr (g)	Single thread Tensile strength lb(kg)
3 cord	Z/3S	300(274)	800(52)	7(3)

The single thread tensile strength shall be determined by the method described in Appendix F.

3.8.....

cordage cotton also prescribed.

3.8 Cordage Hemp. Cordage hemp shall be manufactured from good quality hemp. Hemp shall be clean and free from impurities.

3.8.1 Quality particulars. The cordage hemp shall conform to the following particulars:

Size in(cm)	No of threads	No. of strands	Direction of twist	Tensile strength lb(kg)	Length of coil ft(m)	Weight of coil lb(kg)
3/4(1.9)	12	3	Z/12S/3Z	336(152)	720(219)	12(5.5)
1(2.5)	9	3	Z/9S/3Z	616(299)	720(219)	26(11.75)
1¼(3.25)	12	3	Z/12S/3Z	784(356)	720(219)	34(15.5)

The tensile strength shall be determined according to the method described in Appendix H.

3.9 Toggle wood. The toggle wood shall be manufactured from Teak, Sal, Shisham or Padouk wood and shall conform to the requirements detailed in Figure 3.

3.10 Wire brass. Wire brass for motor car flag shall be of gauge No. 12 SWG.

(Figures 1, 2 and 3 were appended to the agenda for the first meeting of TDC-8 and as they remain unchanged, they are not attached with this copy).

APPENDIX A

Methods of Test for the Determination of Counts of Warp and Weft, Ends and Picks per Unit, Weight per Square Unit and Tensile Strength.

-----

1. CONDITION

1.1 Fabrics shall be tested under standard atmospheric condition.

Standard atmospheric condition of fabric shall be the condition reached by the fabric when it is in moisture equilibrium in a standard atmosphere having a relative humidity of 65 percent at 27°C (80.6°F), with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C (4°F) from the standard temperature, but the variation of temperature during any one series of test shall be not greater than plus or minus 1°C (2°F).

Test specimens shall be conditioned under standard atmospheric condition for not less than 48 hours.

2. YARN COUNT

2.1 Cuts 20 in. (50 cm) apart shall be made in the fabric. Sufficient number of threads lying between the cuts to give at least 16 gr (1 g) of yarn shall be frayed out. Allowance for crimp as indicated in 3 below shall be made and the length of yarn ascertained. Weight of yarn shall then be determined and yarn count calculated from the length and weight so obtained.

3. CRIMP

3.1 Two parallel lines 20 in. (50 cm) apart shall be marked on the sample at right angles to the warp or weft, the crimp of which is to be determined. Ten threads contained in the fabric which pass through these marks shall be frayed out to a distance of about 1 in. (2.54 cm) beyond each mark, care being taken to avoid stretching the thread. Each thread shall be straightened by the application of a load just sufficient to remove the crimp. The length between the marks shall be measured by a rule correctly marked in standard English or metric units and the average length of the 10 samples between the marks ascertained. The crimp shall be recorded as a percentage, calculated as follows:

$$\text{Crimp} = (L - 20) \times \frac{100}{20}$$

where L = average length of samples in inches, between marks after removal of crimp.

$$\text{Crimp} = (L - 50) \times \frac{100}{50}$$

where L = average length of samples in centimetres, between marks after removal of crimp.

4. ENDS PER UNIT

4.1 The fabric shall be laid out on a horizontal surface with enough tension to keep it flat but not enough to stretch it. The

actual.....

54 147

actual number of ends in 1 in. (1 cm) shall be counted at 5 or more places in the fabric and the test results noted. No two places counted shall include the same threads. If there be fewer than 25 ends per inch (10 ends per centimeter), the ends in 3 in. (5 cm) shall be counted at 5 or more places in the fabric, and the average number of ends per inch (per centimeter) calculated.

5. PICKS PER UNIT

5.1 The number of picks per unit shall be determined by the method indicated in 4 above.

6. WEIGHT PER SQUARE UNIT

6.1 Test specimens shall be made up of squares of at least 12 in. (30 cm) sides. Each specimen shall be weighed, and the weight per square unit that is, oz per sq yd (g per sq m) calculated. The weight per square unit shall be the average of at least three test results.

7. TENSILE STRENGTH

7.1 Test specimens, each 2.25 in. (5.5 cm) wide and 13 in. (33 cm) long, shall be cut from the sample. In 5 of these specimens the longitudinal threads shall be warp and in the other 5, weft. No two specimens shall contain the same longitudinal threads and no specimen shall be cut nearer the selvedge than 1/10 of the width of the fabric. Longitudinal threads shall be removed from each edge so as to produce fringes of 0.25 in. (0.5 cm) or 15 threads, whichever gives greater width. The frayed specimen shall be 2 in. (5 cm) in width.

7.2 The test specimen shall be fixed in the jaws of the pendulum type of testing machine, so that the distance between the jaws is 8 in. (20 cm).

7.3 An initial tension shall be applied to the test specimen before it is finally secured in the jaws. The tension shall be uniformly exerted across the width of the specimen and shall be sufficient to bring the specimen to tautness, but in any case shall not exceed 1 percent of the probable tensile strength.

7.4 The rate of traverse of the pulling jaw shall be 12 in. plus or minus 0.5 in. (30.5 cm plus or minus 1.25 cm) per minute.

7.5 The tensile strength shall be the average of five test results and shall be expressed in lb (kg).

APPENDIX B

(To be included later)

APPENDIX C.....

APPENDIX C

Method of Test of Colour Fastness to Light

1. STANDARD PATTERNS

1.1 Standard patterns of fastness to light shall consist of eight blue dyeings and shall be dyed on wool material. The dyestuff used shall be as follows:

Class

a) 0.8 percent Brilliant Wool Blue FFR extra (I.G.)
b) 1.0 percent Brilliant Wool FFB extra (I.G.)
c) 1.2 percent Brilliant Indocyanine 6B (I.G.)
d) 1.1 percent Polar Blue G conc. (Gy).
e) 0.8 percent Solway Blue RS (I.C.I.)
f) 2.5 percent Alizarine Light Blue 4GL (S).
g) 2.5 percent Soledon Blue 4BC pdr. (I.C.I.)
h) 3.0 percent Indigosol Blue AGG (D.H.)

Note: The above patterns issued by the British Standards Institution shall be used as standard patterns for purposes of this standard.

2. TEST SPECIMEN

2.1 A sample of fabric measuring 2.5 in. x 3 in.(6 cm x 8 cm), with the longer dimension running in the direction of the warp, or yarn wound on a white card board measuring 2.5 in. x 3 in. (6 cm x 8 cm), shall be prepared.

3. PROCEDURE

3.1 The test specimen shall be placed in a holder which will shield it from the light except for an area of about 1.5 in. x 2 in. (4 cm x 5 cm) and shall be open to the air on both sides. The test specimen shall be covered with a good grade of window glass about 1/8 in. (0.3 cm) in thickness and shall be open at the sides to allow free access of air to the specimen. The distance between the glass and the specimen shall be not less than 0.5 in. (1.25 cm). The glass shall be kept well cleaned. The specimen shall be exposed to sunlight at an angle of 45° from the horizontal, facing south. No shadows shall be allowd to fall on the specimen. The exposure shall be made between the hours of 9 A.M. and 3 P.M. Cuttings from the standard patterns of Class 6 shall be exposed in a similar manner simultaneously with the test specimen for a sufficient length of time to cause a distinct fading in the latter.

4. DEGREE OF FADING

4.1 The exposed specimen of the test material and the exposed specimen of the standard pattern, together with the unexposed specimens of each, shall be placed in the same plane and in such a position that somewhat diffused day light falls equally on all specimens at an angle of about 45°. The surfaces shall be looked at squarely.

The test specimen shall not show greater change in shade than the reference standard.

APPENDIX D.....

APPENDIX D

Method of Test for the Determination of Fastness of Dye to Washing

1. TEST LIQUOR

1.1 The test liquor shall consist of 0.2 percent actual of neutral soap flakes in distilled water.

2. TEST SPECIMEN

2.1 Preparation of cloth specimen. A portion of the material 4 in. x 4 in. (10 cm x 10 cm) shall be cut out. To it shall be sewn with white cotton thread a 2 in. x 4 in. (5 cm x 10 cm) piece of bleached muslin cloth so that one half of the dyed material is covered while the other is not.

2.2 Preparation of yarn specimen. Pieces of the sewing thread, 4 in. (10 cm) long, weighing from 2 to 3 g shall be bunched together and shall be tied on with white cotton thread, to a piece of bleached muslin cloth 2 in. (5 cm) long and of such width as to cover the bunch entirely and to a piece of scoured white woollen material of the same size.

3. PROCEDURE

3.1 The specimen shall be subjected to the washing treatment as follows:

Washing shall be done in a laundrometer. A quantity of test liquor, about 50 times the weight of the specimen shall be placed in the jar and heated up to 60°C (140°F).

The specimen shall then be placed in the jar and the jar fixed in the wash wheel, which shall then be rotated at 40 rpm in a water bath maintained at 60°C (140°F). The test liquor shall be changed after the first 10 minutes in order to minimise the effect of any finishing substances left in the material. The specimen shall be removed from the jar after a total period of treatment of one and a half hours, well rinsed in warm water, centrifuged or mangled and finally dried.

The dyed material shall not change in shade and shall not show any signs of bleeding on the attached piece.

APPENDIX E.....

APPENDIX E

Method of Test for Determining Relaxation Shrinkage in Cloth

-----

1. TEST SPECIMEN

1.1 Test specimen measuring 20 in. x 20 in. (50 cm x 50 cm) after conditioning shall be laid out without tension on a flat surface, care being taken to keep the cloth free from wrinkles or creases. Three distances, each 18 inches, shall be marked off on the sample in both warp and weft directions. The distances shall be parrallel to the warp and weft threads, at least 6 in. apart and 1 in. from all edges of the sample. Marks shall be made with marking ink or a thin sewing thread sewn in along the distances marked.

2. TEST METHOD

2.1 The specimen shall be immersed and laid flat in a trough of cold water containing 1 percent wetting agent. The trough shall be flat bottomed and shall measure at least 21 in. x 21 in. (53 cm x 53 cm).

2.2 Drying. The specimen shall be removed after two hours and spread out on a horizontal screen, and dried in a gentle current of air.

3. RESULTS

3.1 The dried specimen shall be laid out with tension on a flat surface, care being taken that the specimen is free from wrinkles or creases. The distances marked off shall be measured again and the shrinkage in warp and weft noted.

3.2 The shrinkage shall be expressed as a percentage of the original length.

3.3 The percentage of shrinkage shall be the average of test results obtained on three test specimens.

APPENDIX F

Method of Test for the Determination of Count of Yarn and Single Thread Tensile Strength.

---

1. CONDITION

1.1 Yarn shall be tested under standard atmospheric condition.

Standard atmospheric condition of yarn is the condition reached by the yarn when it is in moisture equilibrium with a standard atmosphere having a relative humidity of 65 percent at 27°C (80.6°F), with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C (4°F) from the standard temperature, but the variation of temperature during any one series of test shall be not greater than plus or minus 1°C (2°F).

Test specimen shall be conditioned under standard atmospheric condition for not less than 48 hours.

2. YARN COUNT

2.1 Cotton. Lea of 120 yards shall be prepared by winding yard on a wrap reel having a perimeter of 1.5 yard.

The Lea shall be weighed and the yarn count calculated. The yarn count shall be the average of 20 test results.

2.2.....

2.2 Silk (Denier Count) A skein of 90 meters shall be prepared by winding the yarn on a wrap reel having a perimeter of 1 meter.

The skein shall be weighed and the yarn count calculated. The yarn count shall be the average of 20 test results.

3. TENSILE STRENGTH

3.1 Single Thread Test. The thread shall be fixed in the jaws of the pendulum type of testing machine so that the distance between the jaws is 20 in. (50 cm). The rate of traverse of the pulling jaw shall be 12 in. plus or minus 0.5 in. (30.5 cm plus or minus 1.25 cm) per minute. The thread shall be broken and the tensile strength recorded.

The tensile strength shall be the average of 20 test results and shall be expressed in lb (kg).

APPENDIX G

Method of Test for Determining the Proofing Against Mildew.

----

1. TEST SPECIMEN.

1.1 Five lengths of the mildew proofed thread each 1 yd (1 cm) long shall be taken, and tied into small bunches.

2. PROCEDURE

2.1 The bunches shall be placed in a Petri dish or similar receptacle, together with 5 similar bunches of untreated thread previously boiled for half an/hour in distilled water and dried. The 10 bunches of thread will then be sprayed with a mixture of spore of equal proportion of the following fungi:

	Kanpur stock culture No.
Pencillium ...	55
Aspergillus fumigatus ...	3
Aspergillus niger ...	4
Chaetomium globsum ...	6
Nemnoniella echinata ...	30
Rhizopus sp. ...	20

After inoculation, the open dish shall be subjected to a temperature of 27°C ± 2°C (80.6°F ± 4°F) and humidity of 90 to 100 percent for 14 days. If, after this period, the untreated thread shows growth of fungi, whilst the treated thread is completely unaffected, the proofing shall be considered satisfactory.

APPENDIX H.....

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APPENDIX H

Method of Test for Determining Tensile Strength of Cordage Hemp.

1. CONDITION

1.1 The cordage hemp shall be tested under standard atmospheric condition.

Standard atmospheric condition of cordage hemp shall be the condition reached by the cordage hemp when it is in moisture equilibrium in a standard atmosphere having a relative humidity of 65 percent at 27°C (80.6°F), with tolerance of plus or minus 2 percent from the standard relative humidity and plus or minus 2°C (4°F) from the standard temperature, but the variation of temperature during any one series of test shall be not greater than plus or minus 1°C (2°F).

The test specimen shall be conditioned under standard atmospheric condition for not less than 48 hours.

2. TENSILE STRENGTH

2.1 Three test specimens shall be cut from the coil. Each test specimen shall be of such length as to allow 3 ft (91.5 cm) clear from the grip of the testing machine (horizontal Good Brand Type) or splice ends. The rate of traverse of the pulling grip or hook shall be 6 in. (15 cm) per minute. A test in which fracture occurs within 6 in. (15 cm) of either grip or splice ends, shall be disregarded and a fresh test made.

The tensile strength shall be the average of 3 test results and shall be expressed in lb (kg).

S. (18) 5738-D/49-Pub. 725-7-49. 60

on 25/7/49

(153)

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419 • Block II

Your Ref : D/6.6035 dt.21-7-49. • Old Secretariat

Our Ref : TDC 8/2A. • Delhi 2, India

22 July 1949.

Subject : INDIAN STANDARD SPECIFICATION FOR NATIONAL FLAG.

Dear Mr. Pai,

I am much obliged to you for your letter quoted above, enclosing a copy of the letter from the Honourable Dr. Rajendra Prasad.

2. The point raised by the Honourable Dr. Rajendra Prasad was discussed by the ISI Committee yesterday and it was decided to introduce in the ISI Specification one variety of cotton fabric which could be readily manufactured by hand-spinning and hand-weaving. When the Committee met again this morning, they considered the text of Dr. Rajendra Prasad's letter which indicates that his intention is that all types of fabrics, including woollen and silk, for use in the National Flag should be of the hand-made variety. While the Committee was discussing the difficulties involved, we received a letter from the All-India Spinners Association, Wardha, indicating that they have now decided to participate in the activities of the ISI.

3. Incidentally for the past two years repeated approaches had been made to the All India Spinners' Association for co-operating with the ISI. After repeated rejections of this request we are now happy to know that the All India Spinners' Association will assist us in the formulation of Indian Standards.

4. The National Flag Committee, therefore, has decided to co-opt representatives of All India Spinners' Association to assist the Committee in deciding the most difficult question concerning the possibility of hand-made cloth satisfying the requirements of the materials required for the National Flag. The Committee will meet again on 12th of August when it is hoped that Khadi interests will be properly represented.

5. I shall be glad if you will kindly bring to the notice of the Honourable Prime Minister the difficulties which we have had to face in the absence of the representation of Khadi interest on the ISI Councils and Committees and also the fact that this situation has now been rectified for which we are all very happy.

With best regards,

Yours sincerely,

LCVerman

(LAL C. VERMAN).

A.V. Pai, Esq.,
Principal Private Secretary to the Prime Minister,
Prime Minister's Secretariat, South Block,
New Delhi.

Copy to ✓ Mr. H.V.R. Iengar, Secretary to the Govt. of India,
Ministry of Home Affairs, South Block, New Delhi.

S.(49) (154)

1, Queen Victoria Road,
New Delhi, the 22nd July, 1949.

5137-D/49-Pol
D/25-7-49

KH
22-7

For advice
V Shan[illegible]
23/7
PS
Secy (Home)

Please put up the letter from Dr Lal C Verma which I sent to Office yesterday; also any other papers on the subject.
[illegible] 23/7
US (P.R.)

My dear Vallabhbhai,

I understand there is a committee consisting of representatives of Home and Defence Ministries and the Indian Standard Institute which is trying to standardise the 'National Flag'. You will recollect that when the question of 'National Flag' was under consideration, a suggestion was made that the cloth of which it should be made should be hand-spun and hand woven but we were told that it was not necessary to include it in the resolution as it was assumed that nothing but khadi would be used in the 'National Flag'. I therefore request that it may be impressed on the members of the committee that the cloth which they prescribe should be hand-spun and hand-woven, no matter what the fibre was, whether cotton, silk, wool or any other. I had referred the matter to the Prime Minister and received the information from his Secretariat that the committee will report to the Home Ministry who will take orders of the Government in due course on the report. I

I therefore request that the committee may be given a direction that they should consider only hand spun and hand woven cloth for the 'National Flag'.

Yours sincerely,
Rajendra Prasad

The Hon'ble Sardar Vallabhbhai Patel,
Deputy Prime Minister, India,
New Delhi.

(156) S. No. 20 63

INDIAN STANDARDS INSTITUTION

Grams : Indstand ~~New~~ Delhi • Phones : ~~2623~~ ~~7046/268~~ 6105 & 5419
• ~~X~~ BLOCK 11,
• ~~RAISINA ROAD~~ Old Secretariat,
• ~~NEW~~ DELHI 2, 26 July 1949.

Your Ref : --
Our Ref : TDC 8/2A

Subject : Third meeting of the Sectional Committee for National Flag of India (TDC 8).

To

All members of TDC 8.

Dear Sir,

on 27/7/49

I am glad to inform you that the Sectional Committee for National Flag of India (TDC 8) had two sessions of its second meeting, at 10.30 A.M. on 21 July 1949 in New Delhi; a copy of the recorded proceedings will follow shortly.

It has been decided to hold the third meeting of TDC 8 at 10.30 A.M. on Friday, 12 August 1949 in Room No.8A, South Block, Central Secretariat, New Delhi, to consider particulars of khadi, cotton, silk and wool, suitable for the manufacture of cloth for the National Flag of India.

I hope you will make it convenient to attend.

Yours faithfully,

C P Halkatti

(C.P. HALKATTI)
Assistant Director(Textiles)

'SS'

A. V. Raman, Esq.

S. No. 21

(157)

64

R+9

Issue F.C. [illegible] 23 3/8

D.O. No.F.41/3/49-Public.

New Delhi,
August 3, 1949.
4

P. 61/Cor.

Will you kindly refer to your d.o. letter dated the 22nd July, 1949, to Sardar Patel, regarding the use of hand-spun and hand-woven cloth for the 'National Flag'?

2. The Committee which is considering the question of standardizing the 'National Flag' is now fully seized of your views that all types of fabrics, including woollen and silk, for use in the 'National Flag' should be of the hand-made variety. The difficulty hitherto has been that, in spite of repeated approaches, the All-India Spinners Association did not agree to co-operate with the Indian Standards Institution. They have, however, now agreed to cooperate with the Institution, and the Committee has accordingly decided to coopt representatives of the All-India Spinners Association to assist it in considering the question of the use of hand-made materials for the 'National Flag'. The Committee will meet again on the 12th of August when it is hoped that the Khadi interests will be properly represented. We propose to await the result of the deliberations of the Committee before taking any further action in the matter.

4/8
RL

HP

(H.V.R. IENGAR)

The Hon'ble Dr. Rajendra Prasad.

Copy to PPS to HPM for information w.r.t. his d.o. letter No.D/S.6034, dated the 21st July 1949.

By order etc.,
Sd. A.V. Raman
Under Secretary.
3.8.49.

P.A. to D.S.(?) may note & return

~~P.A. to D.S.(?)~~ 4/8

I have already included this in this weeks statement as on 1.8.49. I agree & this case as indicated on the file.

4/8/49.

R.D.S.

R.D.S.

S.No.22 5403-D/49-pub of 5-8.49.

65
158

INDIAN STANDARDS INSTITUTION (ISI).

Block 11, Old Secretariat,
Delhi 2, 2 August 1949.

No. TDC 8/2A.

Sub: Second meeting of the Sectional Committee for National Flag of India.

All Members of TDC 8.

Dear Sir,

I have pleasure in enclosing a copy of the proceedings of the second meeting of the Sectional Committee for National Flag of India (TDC 8) held on 21 July 1949 in New Delhi.

Yours faithfully,

(C.P. Halkatti)
Assistant Director (Textiles).

R.D.S
5/8

O/p please on 4/8/49
Public

Encl: 1.

KL.

Mr. A.V. Raman

Indian Standards Institution.

PROCEEDINGS
of the
SECOND MEETING
of the
Sectional Committee for National Flag of India (TDC 8)
held on
21 and 22 July 1949,

First Session : 10.30 A.M. to 1.30 P.M. 21 July 1949 held at Room No. 8A, South Block, Central Secretariat, New Delhi.

Second Session: 9.30 A.M. to 10.30 A.M. 22 July 1949 held at ISI Committee Room, Block 11, Old Secretariat, Delhi.

PRESENT

Chairman:	Mr. Bharat Ram, Delhi Cloth and General Mills Co. Ltd., Delhi.
Members:	Dr. G.M. Nabar, Department of Chemical Technology, Matunga, Bombay.
	Mr. Randhir Singh, Directorate General of Industries & Supplies (Inspection Wing), New Delhi.
	Mr. A.V. Raman, Ministry of Home Affairs, Government of India, New Delhi.
Staff:	Dr. Lal C. Verman, Director, ISI, Delhi.
	Mr. C.P. Halkatti, Assistant Director (Textiles), ISI, Delhi.
	Mr. T. Balakrishnan, Technical Assistant, ISI, Delhi.

Apology for absence was received from Mr.G.E.Longdin.

0. GENERAL

0.1 Chairman in his opening speech expressed regret that Mr. Longdin could not attend the meeting. He said that particularly the qualities of cloth used in the manufacture of the National Flag should be carefully determined so that our National Flag should stand in good stead even in the quality of its manufacture.

1. SUMMARY OF WORK

1.1 The summary of work as given in the agenda was NOTED.

2. DRAFT SPECIFICATION

2.1 Dyed samples of cotton, silk and woollen cloths were tabled.

2.1.1 Mr. Raman informed the Committee that he had received a communication from the Ministry of External Affairs expressing a desire to utilise khadi for the manufacture of National Flag. The Chairman said that the specification for cotton cloth recommended in the draft standard could be suitably altered to suit the requirements of hand loom weaving.

2.1.1.1.....

Quality? cloth [illegible]

2.1.1.1 After some discussion it was DECIDED to have two varieties of cotton cloth for National Flag, one in coarse and the other in fine. The Committee AGREED that the specification for the coarse variety should be such that the cloth could be conveniently manufactured on handlooms. In view of this it was DECIDED to have the coarse cloth in 10s warp and 10s weft with 36s reed and 36 picks per inch. As regards the fine variety of cloth, the committee AGREED to examine Cambric samples to be tabled at the 2nd session the next day.

2.1.2 The material and shade of the silk fabric were APPROVED.

2.1.3 As regards woollen bunting it was DECIDED to request Mr. Wattal who was expected to be in Delhi on 26 July 1949 to get the cloth calendered after shearing, if necessary, and to place the bunting before the Committee for approval, as the finish of the material after dyeing was not as good as it should be.

2.1.4 Dr. Nabar was requested to dye a sample showing the Navy blue shade used for the Chakra and submit it at the meeting for the approval of the Committee. Dr. Nabar kindly UNDERTOOK to do this.

2.1.5 The specification clauses were then gone through in detail and the following DECISIONS were taken:

a) Clause 2.5.1 of the draft should be amended to read

> "The design and make up of the Motor Car Flag shall be in accordance with Figure 2. The Flag shall be made from two layers of the same fabric and stitched together as indicated in the figure.";

b) wherever thread flax had been specified for stitching, alternative provision for the use of cotton sewing thread 9/22s should be made. In this connection CSDS, Kanpur Specification CXS 23 was recommended;

c) method of test for shrinkage as laid down in Appendix E should be applicable to wool and silk fabrics and the method described in IS:9-1949, Indian Standard Method for Determining Shrinkage of Cotton and Linen Cloth on Washing, should be specified for cotton cloth;

d) the ratio of width to length shall be 2:3 or 1:2 and the dimension of the flags shall be as given in Figure 1. There shall be six sizes of flags all including the flag for Motor Cars.

2.1.5.1 The desirability of introducing suitable provisions for making the finished flag water repellent was also considered, and it was AGREED that the reactions of the Defer Ministry to this proposal should be first obtained.

SECOND SESSION

2.1.6 The Committee examined the samples of Cambric cloth and DECIDED that the fine variety of cloth should conform to the following quality particulars:

Count		Ends Per in. (Per cm)	Picks Per in. (Per cm)	Weight oz/sq yd (g/sq m)	Tensile Strengt (2" x 7" str	
Warp	Weft				Warp lb(kg)	Weft (kg)
60s	60s	102(40)	96(38)	2.5 ± 1/8 (80 ± 4)	75 (34)	63 (28)

2.1.7.....

2.1.7 A letter addressed to Director, ISI, received from Mr. A.V.Pai, Principal Private Secretary to the Prime Minister enclosing a copy of the letter from the Honourable Dr. Rajendra Prasad to the Prime Minister was read out at the meeting.

2.1.7.1 The Committee considered the text of the Honourable Dr. Rajendra Prasad's letter which indicated that the National Flag should be of the stuff that was hand-spun and hand-woven whether it was cotton, silk or wool or any other fibre.

2.1.7.2 After some discussion it was DECIDED to co-opt representatives of the All-India Spinners' Association to assist the Committee in selecting hand made cloth satisfying the requirements of the materials for the National Flag.

3. ANY OTHER BUSINESS

3.1 The Committee DECIDED to hold the next meeting on 12 August 1949 in Room No. 8A, South Block, Central Secretariat, New Delhi and to invite the representatives of the All India Spinners' Association to assist the Committee in formulating cloth standards for the manufacture of the National Flag of India.

VSM.

5532-014 pub I 10-8

S. No 23

162

1, Queen Victoria Road,
New Delhi, the 8th August 1949.

p. 64 ante

My dear Iengar,

Please refer to your D.O. No. F41/3/49-Public dated the August 1949. I note that the Committee considering the questi of standardizing the 'National Flag' is now fully seized of m views that all types of fabrics, including woolen and silk, us in the 'National Flag' should be of hand-made variety. I am a it is not enough that the Committee should know my views which of course, no authority and which may even be irrelevant from point of view of standardization when the question of 'National Flag' is under consideration. A point was raised that the clot should be hand-spun and hand-woven and we were assured by the Government that it was not necessary to put that in the resolut as it was assumed that the cloth will be hand-spun and hand-w It is, therefore, not only my view but I hope it is still thevi of the Government. If I am correct in my assumption that the Government's view does not differ from mine in this respect the I think it is necessary that the Committee should be informed the Government's view and a directive should be given to it to consider standardization so far as cloth was concerned with tha limitation. I would, therefore, request that a directive sho be issued to the Committee to that effect. I hope you will ta Government's orders and communicate the same to the Committee. I may add that I am writing to the Prime Minister also.

Yours sincerely,

Rajendra Prasad

(Rajendra Prasad)

Shri H.V.R.Iengar,
Secretary, Home Ministry.

Can office frame this assurance? Pl consult Law's Secy. if necessary & C.A. Office.

10/8

~~AS(I)~~,

This shd be attended to immediately.

10/8

Pub.

S. No. 24

(163)

70

ISSUED
On 12/8
Initial
R. & I. (A)

Issued today on 12/8

~~[illegible] paue on 8/c [illegible] to be [illegible] below~~

DEPARTMENT.

BRANCH.

File No.

Serial No.

Draft Letter / Memorandum / Telegram

Class for telegrams: Ordinary / Express / Urgent* / Priority / Clear Line†

*Only for Foreign Telegrams.

†Not for Foreign Telegrams.

No. 41/3/49-Public Dated 12.8. 1949.

	To be issued on	Issued on
1st Reminder		12/8
2nd Reminder		40
3rd Reminder		
Heading:		
Case or Diary No.		

RECEIVED [illegible] R. & I. (A)

If post copy of telegram required

Date of despatch of above

List of enclosures

(Code word for telegrams.)

To

The Chairman,
Selection Committee for
National Flag of India(TD~~S~~C 8)
C/o Indian Standards Institute
Block II, Old Sectt, Delhi

Sir,

I am directed to say that Government desire that the "National Flag" intended for Government purposes should consist only of hand-spun and hand-woven cloth. I am accordingly to request that your Committee in considering the standardisation of the 'National Flag' should proceed on that basis and should lay down the specification of the cloth (including woollen and silk) and dyes accordingly.

Sarries

2. The Government of India would be glad to be informed, as early as possible, of the action taken on this letter.

Yours faithfully,

Secretary.

RDS 12/8

S. No. 25

No. 41/3/49-Public

164

New Delhi,
August 12, 1949.

Issue F. C. below
12/8

ISSUED
On 12/8
Initd
R. I. (A)

p. 69/Cor.

With reference to your letter dated the 8th August, on the subject of standardising the National Flag, I enclose, for your information, a copy of an official letter which we have sent to the Chairman of the Standardisation Committee on the directive of the Prime Minister.

sent ---

x p. 72 infra

(H.V.R. IENGAR)

The Hon'ble Dr. Rajendra Prasad.

No. 41/3/49-Public
GOVERNMENT OF INDIA
Ministryof Home Affairs

From

H.V.R. Iengar, I.C.S.
Secretary to the Government of India.

To

The Chairman,
Selection Committee for National Flag of India(TDC8)
c/o Indian Standards Institute,
Block N, Old Secretariat,
DELHI.

NEW DELHI-3; the 12th August 1949.

Sir,

I am directed to say that Government desire that the "National Flag" intended for Government purposes should consist only of hand-spun and hand-woven cloth. I am accordingly to request that your Committee in considering the standardisation of the 'National Flag' should proceed on that basis and should lay down the specification of the cloth (including woollen and silk fabrics) and dyes accordingly.

2. The Government of India would be glad to be informed, as early as possible, of the action taken on this letter.

Yours faithfully,

sd/-

(H.V.R. IENGAR)
SECRETARY TO THE GOVERNMENT OF INDIA.

H.O.SHARMA.
12-8-1949.

S.No.26 5568-D/49-Pub d/ 11-8-49.

(16) 13

MITTER SAIN RUP CHAND
MERCHANTS & COMMISSION AGENTS.

Telephone :-
21141.

Telegrams :
PASUPATHY

336, KALBADEVI ROAD,
BOMBAY 2.

20th. July 1949.

3282-P

The Secretary,
Ministry of Home Affairs,
Government of India,
New Delhi.

Pub. 22/7

Dear Sir,

We refer to a newpaper report appearing in the " Times of India " dated the 19th. inst., to the effect that a Committee will meet in New Delhi to consider a uniform method for the manufacture of Indian National Flags. A cutting of this new is attached for your ready reference.

We have been manufacturing Indian National flags from all wool Indian and English buntings; and have pleasure in enclosing herewith two samples flags in the size of 3'X2'. The " Ashoka Chakra " has been hand-painted in oil.

The Indian bunting is of fast chrome dyes; and the English bunting is the usual imported from the United Kingdom.

We shall be grateful if you will please direct these flags to be placed before the abovementioned Committee; and as we were not aware of the address where the Committee is to meet, we have taken to liberty of addressing you on the subject and of requesting you to direct our representation.

We are in a position to manufacture any quantity of flags in all the sizes that may be required.

Thanking you,

Yours faithfully,
For MITTERSAIN RUPCHAND,

(Dulichand M.Jain).

P.

S. No. 27

(167)

74

No. 41(3)/49-Public

New Delhi,
the 11th August, 1949.

To

Shri Dulichand M. Jain,
C/o Messrs Mitter Sain Rup Chand,
Merchants and Commission Agents,
336, Kalbadevi Road,
Bombay 2.

Dear Sirs,

p.73/Cov.

I am to acknowledge receipt of your letter of the 20th July 1949 together with the two samples of flags sent therewith. This has been mentioned to the Committee referred to by you and will be shown to them at their meeting to take place on the 12th. Their views, if any, will be intimated to you. It is regretted that this could not be replied to earlier.

IS
11/8
Initial
R.&I.A.

Yours faithfully,

O/c

(A.V. Raman)
Under Secretary.

S. No. 28

5934-D/49-pah
26.8.49

(168)

75

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419
• BLOCK II
• OLD SECRETARIAT
• DELHI 2, INDIA

22 August 1949.

Your Ref :
Our Ref : TDC 8/2A.
Subject : SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA (TDC 8).

Chairman and Members of TDC 8.

Dear Sir,

I enclose a copy of the proceedings of the third meeting of the Sectional Committee for National Flag of India (TDC 8) held on 12 August 1949 in New Delhi.

Yours faithfully,

Lal C Verman
(Lal C. Verman)
Director.

Encl: 1.

Mr. A. V. Raman

KL.

Secy may kindly see for perusal full official minutes
AVRaman
24.8.49

25/8

P/ [illegible]
on 25/8/49
Publicity

R.D.
25/8 Secretary

Indian Standards Institution

PROCEEDINGS
of the
THIRD MEETING
of the
SECTIONAL COMMITTEE
for the
NATIONAL FLAG OF INDIA (TDC 8)
held in
Room No.8A, Ministry of Home Affairs,
South Block, Central Secretariat, New Delhi
at 10.30 A.M. on Friday 12 August 1949.

PRESENT.

Chairman:	Dr. Lal C. Verman	Director, Indian Standards Institution, Delhi.
Members:	Mr. G.E. Longdin	New Egerton Woollen Mills Ltd., Dhariwal.
	Sri M.K. Krishnamurthi	Ministry of Defence, Government of India, New Delhi.
	Sri Randhir Singh	Directorate General of Industries and Supplies (Inspection Wing), New Delhi.
	Sri A.V. Raman	Ministry of Home Affairs, Government of India, New Delhi.
	Sri Dwarka Nath Lele	All-India Spinners' Association, Sevagram.
By Invitation:	Sri Vichitra Narain Sharma	Shri Gandhi Ashram, Meerut.
	Sri Kapil D.O. Pandey	Shri Gandhi Ashram, Meerut.
	Dr. N.L. Narayan	Sheep and Wool Improvement Officer, Rajasthan, Jaipur.
Staff:	Sri C.P. Halkatti	Assistant Director (Textiles) Indian Standards Institution, Delhi.

Apologies for absence were received from Sri Satish Chandra Das Gupta, Khadi Pratishthan, Sodepore, Calcutta and Dr. G.M. Nabar, Department of Chemical Technology, University of Bombay, Bombay.

In the absence of Mr. Bharat Ram, the Chairman, Dr. Verman was voted to the chair.

.........Item 0

Item 0. GENERAL

1

0.1 In his opening remarks, the Chairman stated that the Government of India desired that the National Flag of India should be manufactured from hand-spun and hand-woven cloth only and consequently the committee would have to reconsider standardisation of the National Flag from a new angle. He said that the Ministry of Defence had been mainly using flags made from woollen bunting which had to satisfy stringent requirements and that it was desirable that the quality of the woollen bunting made from hand-spun and hand-woven cloth should approach as nearly as possible the specifications laid down for mill-made bunting. He was glad to welcome the representatives of those organisations and associations, who were connected with the production of hand-spun and hand-woven cloth, to the meeting to give expert advice on this subject.

Item 1. DRAFT SPECIFICATION

1.1 The Committee considered the possibility of manufacture of various components that would go into the making of the Flag from khadi.

1.2 Mr. Longdin suggested that suitable samples of cloth, in cotton, wool and silk, should be manufactured by the khadi organisations and that they should all be tested against various requirements; the data so collected would give the committee a clear idea of the quality of those materials, which, in turn, would help the committee to evolve proper standards. He was doubtful whether a suitable woollen khadi could be manufactured.

1.3 This was agreed to and the committee DECIDED that samples of woollen khadi should be manufactured in the first instance and examined by the committee in its next meeting before being sent for tests. As regards cotton & silk materials, the committee AGREED to the manufacture of samples and their processing and testing before the next meeting. The work was accordingly allotted as follows:

a) The All India Spinners Association, Sevagram, in collaboration with Shri Gandhi Ashram, Meerut would manufacture cotton khadi from as many types of cotton as may be readily available and Newars 3 inches and 5 inches wide, to the particulars given in Table I. They would despatch 24 yards of cotton khadi of each type, one roll of 50 yards each of the 3 inch and 5 inch Newar to the ISI Directorate for test purposes.

.........Table I

TABLE I

Materials	Counts Warp	Counts Weft	Ends per inch	Picks per inch
Cotton khadi	2/24s	2/24s	40	36
Newar 3" wide	3/16s	3/16s	42	32
Newar 5" wide	2/10s	2/10s	68	19

b) This Association would also arrange to have manufactured a good quality of silk fabric, which they consider satisfactory for use in the National Flag and forward 24 yards of the material of each type to the ISI Directorate for test purposes.

c) Sheep and Wool Improvement Officer, Rajasthan, Jaipur would have manufactured wool khadi, as near to the requirements in Table II as possible, and forward 24 yards in loom state to the ISI Directorate for the scrutiny of the committee.

TABLE II

Count Warp	Count Weft	Ends per inch	Picks per inch	Weight oz/sq yd	Tensile Strength on 2" x 7" strips Warp lb	Tensile Strength on 2" x 7" strips Weft lb
2/22s	2/22s	26	26	5 ± 0.5	70	70

d) The ISI Directorate would forward the samples of cotton and silk khadi, 3 inches and 5 inches Newars together with samples of approved shades of colour to Sri Krishnamurthi of the Defence Ministry, New Delhi, who would forward the materials to the Chief Superintendent, Technical Development Establishment Laboratory (Stores), Kanpur, for undertaking

the following.....

79 (172)

the following items of work on each sample:

i) Scouring, finishing and dyeing of suitable pieces from each sample, the processes employed being such that they could readily be translated to cottage-scale operations;

ii) Detailed report on above processes;

iii) Full test reports on

1) Cotton and Silk fabrics in grey, scoured and dyed states;

2) Newar 3" wide and 5" wide in grey and scoured state;

iv) Spectrophotometric values on the cotton and silk materials after dyeing them in India saffron, India green and navy blue to match the three approved shades of colours of the National Flag;

v) Preperation of two flags 3' x 2' size in each type of material supplied.

e) The Defence Ministry representative would supply all data and materials to the ISI Directorate as soon as available including cuttings of cloth samples in grey, scoured and dyed states and Newar samples in grey and scoured states.

1.4 The Committee DECIDED that the data furnished by the representative of the Defence Ministry, along with cloth and Newar samples in different states, including the woollen khadi sample in grey state, should be considered at the next meeting of the committee which may be held in New Delhi on 22 October 1949.

TRT.

S. No. 29

(173)

80

MITTER SAIN RUP CHAND

MERCHANTS & COMMISSION AGENTS.

Telephone :-
21141.

Telegrams :
PASUPATHY

336, KALBADEVI ROAD,
BOMBAY 2.

12th. September 1949.

Shri A. V. Raman,
Under-Secretary,
Ministry of Home Affairs,
Government of India,
New Delhi.

6550-Hy-Pub
19/9

p. 74/Cor.

Dear Sir,

We refer to your letter No.41(3)/49-Public dated the 11th. August, in respect of the National Indian Dominion Flags manufactured by us.

We keenly await the comments of the Flag Committee in respect of the same.

ack
19/9/49

Public

[illegible]
19/9

May we also take this opportunity of requesting you to favour us with your esteemed orders for the supply of Flags for the celebration of our First Republic Day on the 26th. of January 1950. We are manufacturing Flags in the undermentioned sizes:

Size 3'x 2'. . :	Rs 7/10/-	each.	) Made from all-wool buntings
6'x 4'. . :	Rs 19/12/-	"	) Complete with tailoring,
9'x 6'. . :	Rs 38/8/-	"	) cording, tuggle and
12'x 8'. . :	Rs 82/8/-	"	) hand-painted 'Ashoka
18'x12'. . :	Rs 159/12/-	"	) Chakra' in oil.

We shall be pleased to send sample flags for your inspection, if you should so desire.

Assuring you of our best services,

Yours faithfully,
For MITTERSAIN RUPCHAND,

(Dulichand M.Jain)

P.

S. No. 30

(174)

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MINISTRY OF HOME AFFAIRS.
~~DEPARTMENT/OFFICE~~

File No.

Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

1. Date of despatch

2. List of enclosures

ISSUED
On 5/x/49
Initial
R.P.I.(A)

Issue
REV 3/10

Mr. ROS
6/10

RECEIVED IN THE R. & I. (A)
On 5/x
Case No. 2539
Typed by R 55
Compared by Nagar

5/x

p. 80/Cor.

No.F.41/3/49-Public. Dated 5th ~~September~~ Oct: '49

To

Messrs. Mittersain Rupchand,
Merchants and Commission Agents,
336, Kalbadevi Road,
Bombay 2.

Subject: Indian National Flag.

Dear Sirs,

With reference to your letter dated the 12th September 1949 on the above subject, I am directed to say that no decision has yet been taken as regards the specification for the National Flag. It is expected to be settled shortly and Government are likely to adopt whatever is decided on by the Textile Division Council of the Indian Standards Institution in the ~~(TDC)~~ regard~~ing~~. N~~ational Flag set up by the Indian Standards Institution.~~ An announcement is also likely to be made in due course.

— The Government of India do not require any flags at present.

Yours faithfully,

U.S.(PB).

S. No. 31

(175)

(82)

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand
Delhi
Phones : 6105
5419
Block II
Old Secretariat
Delhi 2, India

Your Ref :

Our Ref : TDC 8/2A.

8 October 1949.

Subject : FOURTH MEETING OF THE SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA (TDC 8).

6999/49-pub
x/x/49.

Chairmen and Members of TDC 8.

F.79/Gov.

Dear Sir,

Kindly refer to para 1.4 of the proceedings of the third meeting of TDC 8 wherein it was stated that the next meeting would be held in New Delhi on 22 October 1949.

2. We have been informed by some of the members that this date does not suit them as Diwali festival falls about that date, and further, varieties of khadi samples for test purposes have not yet been received by ISI Directorate. As it would be futile to call a meeting before the samples and the test reports are received it is proposed to postpone the meeting to another date, probably towards the end of November 1949.

PP
[illegible]
10/10/49

Rubbie
Mr. [illegible]
10/10

3. It is requested that the respective members, entrusted with the work of manufacturing of khadi samples may please expedite despatch of the samples to ISI for further action.

Yours faithfully,

C.P. Halkatti
(C.P. Halkatti)
Assistant Director (Textiles).

Sri A. V. Raman

KL.

RAS 21/1

(176)

S.No. 32

D.719/50-pub 21/1/50.

(83)

INDIAN STANDARDS INSTITUTION (ISI)

Block 11,
Old Secretariat,
Delhi 2, 19 January 1950.

Our Ref: TDC 8/2A.

SUBJECT: SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA(TDC 8)

Chairman and Members of TDC 8.

Dear Sir,

Further to this office letter of even number dated 16 January 1950, I have pleasure in forwarding a copy of the agenda for the fourth meeting of the Sectional Committee for National Flag of India (TDC 8), to be held on 30 January 1950, in New Delhi.

I hope you will kindly attend the meeting.

Yours faithfully,

Mr. A. V. Raman.

J Balakrishnan

for Assistant Director(Textiles)

Encl:1.

Pl give me the [illegible] separately
ASR
21/1

Public

INDIAN STANDARDS INSTITUTION (ISI)

AGENDA
for the
FOURTH MEETING
of the
SECTIONAL COMMITTEE FOR NATIONAL FLAG OF INDIA (TDC 8)
to be held in
Room No.8A, Ministry of Home Affairs,
South Block, Central Secretariat, New Delhi
at 10.30 A.M. on Monday 30 January 1950.

Item 0. GENERAL

0.1 Opening remarks by the Chairman.

Item 1. COTTON KHADI

1.1 In accordance with the decision of the Sectional Committee in its last meeting, Sri Dwarka Nath Lele arranged for the manufacture of cotton khadi and the following samples were received from the All India Spinners' Association through Shree Gandhi Ashram, Delhi:

1) Cotton Khadi, Grey (Hyderabad)
2) " " (Maharastra)
3) " " (Karnatak)
4) " " (Gujerat)
5) " " (Rajasthan)
6) " ,Bleached (Tirupur)
7) " ,Grey (Sevagram 1)
8) " " (Sevagram 2)
9) " " (Punjab)

1.2 The samples were sent to Sri M. Krishnamurthi, the representative of the Defence Ministry on TDC 8, for onward transmission to the Chief Superintendent, Technical Development, Textiles and Clothing, Kanpur, for testing and other purposes enumerated under para 1.3(d) and (e) of the proceedings of the last meeting of TDC 8.

1.2.1 A copy of interim physical test reports on the above-mentioned samples, sent by Sri Krishnamurthi, is given in Annexure I for consideration.

1.2.2 Cuttings from these samples and final test reports, if received from Sri Krishnamurthi before the meeting, will be tabled for consideration.

Item 2. SILK KHADI

2.1 Sri Lele forwarded through Shree Gandhi Ashram a sample of khadi silk which was also sent to Sri Krishnamurthi for tests and other purposes.

2.1.1 The interim test report received from Sri Krishnamurthi is given in Annexure II for the Committee's consideration.

2.1.2 A cutting from the sample and the final test report, if received before the meeting, will be tabled for consideration.

Item 3.....

Item 3. WOOLLEN KHADI

3.1 Dr. N.L. Narayan, Sheep and Wool Improvement Officer, Rajasthan, Jaipur, forwarded five samples of khadi woollen bunting.

3.2 Sri Vichitra Narain Sharma of Shree Gandhi Ashram, Meerut, also forwarded three samples of khadi woollen bunting for consideration.

3.3 Since the Defence Ministry is main consumer of woollen flags, cuttings from all the above eight samples were sent to Sri Krishnamurthi for his opinion as to which of those samples would be considered satisfactory by the Defence Ministry.

3.3.1 The interim test reports on the woollen bunting samples are given in Annexure III.

3.3.2 The samples and Sri Krishnamurthi's reply regarding Defence Ministry's choice, if received before the meeting, will be tabled for the Committee's consideration.

Item 4. NEWAR KHADI

4.1 Sri Lele forwarded through Shree Gandhi Ashram a sample of Cotton Newar 3" wide.

4.1.1 The sample was sent to Sri Krishnamurthi for testing, and the interim test report received from him is given in Annexure IV for consideration of the Committee.

4.1.2 This sample and the final test report, if received in time, will be tabled for consideration.

4.2 A sample of Cotton Newar 5" wide is awaited from Sri Lele and it will be tabled, if received.

Item 5. OPTICAL ILLUSIONS

5.1 Mr. Y.B. Ranade of Jubbulpore in a letter to the Institution suggested that it would be necessary to ensure that not only three stripes of colours are in proper sequence but also that if the three stripes are to be of equal width, the stripes, specially in bigger flag, appear to be of equal width. His statement about optical illusions concerning the French Flag is quoted below:

> "It might help to know what the French did about their flag, which is also a tri-colour but with vertical blue, white and red (reading from flag-staff onwards) stripes. For years the French flag was made with equal bands of the three colours according to the National Assembly's directions; but though equal, the bands never looked equal due to an optical illusions; the blue appeared wider than the white and white wider than the red.
>
> "At last, after many experiments, it was officially decided that in every hundred parts, the blue should be 30, the white 33, and the red 37. These proportions give the effect of equal width to the three stripes of the French Tri-colour to-day".

5.1.1 .....

5.1.1 Official confirmation of these historical facts have been requested for from General P. Salmon, Minister for Industries and Commerce of the French Government.

5.1.2 Mr. Ranade, in reply to the ISI Directorate's request for quantitative proposals concerning relative proportion of the three colours in order to give impression of equality, has regretted his inability to give definite proposals in the absence of laboratory facilities, but has made the following suggestions:

"1) In order to give an impression of equal width, the stripes will have to be made of varying width, and the exact proportion of the width, will have to be determined by actual experiments;

2) Due to the presence of the CHAKRA in the middle of the white stripe, the white stripe will appear narrower at the ends and the lines of the white stripe would not look parallel. This would give a distorted appearance to our flag;

3) Before the exact proportion of the three coloured stripes is determined, the exact TINT of the Saffron and green will have to be prescribed."

5.2 The Committee may consider these suggestions and issue directive.

Item 6. ANY OTHER BUSINESS

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Annexure I
(Item 1)

COTTON KHADI

Sample	Widtl (8 deters)	No. of threads/1" Warp (6 deters)	No. of threads/1" Weft (15 deters)	Counts of yarn (Cond.at 65-70% R.H.for 48 hrs) Warp after desizing	Counts of yarn Weft	Wt.per sq. yd.(cond. at 65-70% R.H.for 48 hrs. 12"x12" basis	B.S.4" x 6$\frac{5}{8}$" bet.grips (Cond.at 65-70% R.H. for 48 hours in lbs) Warp	B.S. Weft	Twist multiplier doubling Warp	Twist multiplier doubling Weft
ISI-1 Hyderabad Grey	33.2/8"/33.4/8" Av.33.2/8"	37/39 Av.38 2 folds	29/38 Av.34 2 folds	$2/17.1^s$	$2/18.5^s$	6.8 ozs	180 170 Av.175	160 140 Av.150	1.6	1.5
ISI-2 A Maharashtra Grey	33" /33.4/8" Av.33.2/8"	39/42 Av.40 2 folds	34/46 Av.40 2 folds	$2/24.5^s$	$2/20.9^s$	5.0 ozs	125 150 Av.138	155 150 Av.153	4.4	3.4
ISI-3 A Karnataka Grey	27.1/8"/27.6/8" Av.27.3/8"	36/40 Av.39 2 folds	37/47 Av.42 2 folds	$2/24.5^s$	$2/27.0^s$	5.7 ozs	130 145 Av.138	165 175 Av.170	2.4	3.1
ISI-4 Gujcrat Grey	30.2/8"/30.6/8" Av.30.4/8"	36/38 Av.37 2 folds	32/50 Av.38 2 folds	$2/28.2^s$	$2/22.3^s$	4.8 ozs	110 130 Av.120	160 140 Av.150	3.0	1.2
ISI-5 Rajashthan Grey	27.7/8"/28.4/8" Av.28.2/8"	36/39 Av.38 2 folds	35/43 Av.39 2 folds	$2/19.3^s$	$2/17.1^s$	6.8 ozs	140 190 Av.165	230 225 Av.228	3.3	2.7
A ISI-6 Tirupur Bleached	26.3/8"/27.1/8" Av.26.5/8"	39/41 Av.40 2 folds	34/42 Av.40 2 folds	$2/20.9^s$	$2/20.3^s$	5.2 ozs	160 150 Av.155	130 135 Av.133	5.1	4.6
ISI-7 Sevagram(1) Grey	28.7/8"/29.7/8" Av.29.3/8"	39/42 Av.40 2 folds	24/39 Av.30 2 folds	$2/20.3^s$	$2/15.4^s$	6.6 ozs	180 140 Av.160	155 175 Av.165	2.1	1.9
ISI-8 Sevagram(2) Grey	28.5/8"/29.4/8" Av.29"	40/42 Av.41 2 folds	26/39 Av.33 2 folds	$2/20.3^s$	$2/29.4^s$	5.1 ozs	160 200 Av.180	70 110 Av.90	2.1	1.2
A ISI-9 Khadi Punjab, Grey	26.6/8"/27.2/8" Av.27" (9 deters)	40/42 Av.41 2 folds	35/39 Av.37 2 folds ~~(after desizing)~~ (after desizing) (17 deters)	$2/19.1^s$ $2/20.2^s$	$2/17.2^s$ $2/19.8^s$	5.7 ozs	180 190 195 Av.188	190 185 200 190 185 Av.190	1.6 (Single 3.9)	1.1 (Single 4.9)

Note:
(i) Picking is uneven in all the above samples.

(ii) Prominent blackish stains are observed in sample ISI-1, near the selvedges at an interval of one yard throughout the piece.

(iii) Samples ISI-3, 5 and 6 have uneven selvedges.

(iv) Samples ISI-7 and 8 contain snarls and knots.

(v) Sample ISI-9 contains irregular selvedges.

(vi) TPI for sample ISI-9 (10 determinations) are : Single- Warp 11.5/25.0(Av.17.4), Weft 16.5/26.5(Av.21.1); Folded- Warp 3.8/7.4(Av.4.9), Weft 3.0/4.5 (Av.3.4).

CL.

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ANNEXURE II
(Item 2)

SILK - KHADI

Sample	Width (9 deters)	Wt.per sq yd cond. for 48 hours	Threads per inch Warp (7 deters)	 Weft (22 deters)	Counts of yarn Warp	 Weft	B.S. 4" x 6$\frac{5}{8}$" bet. grips cond. @ 65-70% R.H. for 48 hours in lb Warp	 Weft
ISI-10 Silk	36" 36.4/8" Av.36$\frac{1}{8}$	1.17 ozs 1.5 ozs	82/85 Av.84 2 ply 100±10%	88/120 Av.106 2 ply 120±10%	(Final) 32.60 Deniers	65.19 Deniers	100 85 85 90 85 Av.89	215 150 135 165 175 Av.168

100 lbs for 2 inches both warp & weft

Note: The sample contains irregular selvedges. Picking is uneven and weft bars are prominent throughout the piece. Broken, floating ends & loose broken picks are seen. Weft yarns of different deniers are used.

CL.

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ANNEXURE III

(Item 3)

WOOLLEN BUNTING - KHADI

Sample	No. of threads per in. (5 determinations) Warp	Weft	Counts of yarn (Cond. at 65-70% R.H. for 48 hours. (Basis - 560 yards). Warp	Weft	Wt. per sq yd. (cond. at 65-70% R.H. for 48 hrs. (6 x 6")	Remarks
ISI-12 Khadi	31/34 Av.33 -2 folded-	15/18 Av.16	$2/27.8^{s}$	$2/24.6^{s}$	3.85 oz	Open structure Broken ends & Picks, Uneven yarn & unsatisfactory finish.
ISI-13 Khadi	31/34 Av.33 -2 folded-	16/18 Av.17	$2/25.2^{s}$	$2/24.3^{s}$	4.29 oz	
ISI-14 Khadi	28/30 Av.29 -2 folded-	18/21 Av.19	$2/20.3^{s}$	$2/18.8^{s}$	5.27 oz	Grey & broken ends & Picks.
ISI-15 Khadi	21/23 Av.22 -2 folded-	19/23 Av.21	$2/14.9^{s}$	$2/16.9^{s}$	5.50 oz	Uneven yarn, Broken ends & Picks, defective selvedge unscoured.
ISI-16 Khadi	22/24 Av.23 -2 folded-	22/30 Av.25	$2/21.0^{s}$	$2/26.7^{s}$	5.10 oz	Slubs, Broken ends & Picks & cockled finish.
ISI-17 Khadi	28/29 Av.28 -2 folded-	26/29 Av.27	$2/24.6^{s}$	$2/26.7^{s}$	5.08 oz	Cockled & Unpressed finish.
ISI-18 Khadi	27/28 Av.27 -2 folded-	24/27 Av.26	$2/22.6^{s}$	$2/17.9^{s}$	5.67 oz	Uneven yarn, unscoured, and unsatisfactory finish.
ISI-19 Khadi	26/27 Av.26 -2 folded-	23/24 Av.23	$2/23.0^{s}$	$2/23.3^{s}$	4.83 oz	Broken ends & picks & not properly finished.

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ANNEXURE IV
(Item 4)

NEWAR 3" - KHADI

Sample	Width (13 deters)	Wt. per 20 yds. Cond. for 48 hours.	No. of Threads. Ends in full. Width.	No. of Threads. Picks/1" (16 deters)	Counts of yarn. (after desizing) Warp	Counts of yarn. (after desizing) Weft.	Turns/1" Doubling Warp (10 deters)	Turns/1" Doubling Weft (10 deters)	Twist Multiplier Doubling Warp	Twist Multiplier Doubling Weft	B.S. 20" between grips. Cond. @ 65-70% R.H. for 48 hours in lbs
ISI-11 Tape, Newar 3", Undyed.	2.14/16" 3.2/16" Av.3	25.9 oz.	186 2 folds	15/27 Av.22 2 folds	5.02^s (Resultant)	3.86^s	15.5/22.9 Av.18.7	14.0/24.5 Av.21.3	8.3	10.8	290 lbs

Note: The sample, contains irregular selvedges. Knots and snarls are seen throughout the tape. Picking is uneven.

CL.

90

S. No. 33

Grams: INDSTAND
DELHI

THE INDIAN STANDARDS INSTITUTION (ISI)

Block 11,
Old Secretariat,
Delhi 2, 2 March 1950.

Our Ref: TDC 8/2A

D. 20/3/50 ph
9/3/50.

The Chairman and all members of TDC 8

Dear Sir,

I have pleasure in forwarding herewith a copy of the proceedings of the 4th meeting of the Sectional Committee for the National Flag of India. (TDC 8) held in New Delhi on Monday 30 January 1950.

pp. 92-95 infra

Yours faithfully,

TBalakrishnan

(T.BALAKRISHNAN)
Offg. Assistant Director(Textiles)

Op [illegible]
ay 8/3/50

Publi

Encl:1
M/

Rao Saheb A.V. Raman

RBS 9/3

Indian Standards Institution.

PROCEEDINGS
# of the
FOURTH MEETING
# of the
Sectional Committee
for the
National Flag of India (TDC 8)

held in
Room No.8A, Ministry of Home Affairs,
South Block, Central Secretariat, New Delhi,
at
10.30 A.M. on Monday 30 January 1950.

PRESENT

Chairman:	Dr. Lal C.Verman	Director, Indian Standards Institution, Delhi.
Members :	Mr. M.K.Krishnamurthi	Directorate of Technical Development, Ministry of Defence, Government of India, New Delhi.
	Mr. A.V. Raman	Ministry of Home Affairs, Government of India, New Delhi.
	Mr. Randhir Singh	Directorate General of Industries and Supplies, (Inspection Wing), New Delhi.
	Mr. Dwarka Nath Lele	All-India Spinners' Association, Sevagram.
By invitation:	Mr. Vichitra Narain Sharma	Shri Gandhi Ashram, Meerut.
	Dr. N.L. Narayan	Sheep and Wool Improvement Officer, Rajasthan, Jaipur.
	Mr. Kapil D.O.Pandey	Shri Gandhi Ashram, Meerut.
	Mr. Sushil Sarkar	Ministry of Information and Broadcasting, Government of India, New Delhi.
	Mr. P. Hariharan	13C, Pherozshah Road, New Delhi.
Staff :	Mr. T.Balakrishnan	Technical Assistant, Indian Standards Institution, Delhi.

Apologies for absence were received from the following:

1)	Mr. Bharat Ram	Delhi Cloth and General Mills Co.Ltd., Delhi.
2)	Dr. G.M. Nabar	Department of Chemical Technology, Matunga, Bombay.

3) ....

3) Mr. G.E. Longdin - The Cawnpore Woollen Mills,
Kanpur.

In the absence of Mr. Bharat Ram, the Chairman, Dr. Verman was voted to the Chair.

0. GENERAL

0.1 In his opening remarks, the Chairman stated that the Committee was hopeful of bringing out the specification for the National Flag before the Republic Day, but due to the work involved in the preparation of suitable hand-made cotton, silk and woollen cloth and the subsequent process of dyeing, testing etc, the specification could not be finalised as anticipated. He hoped that with the co-operation of the bodies who were assisting the Committee in the preparation of material for the flag, it would be possible to bring out the specification at an early date.

1. COTTON KHADI

1.1 Nine samples of cotton khadi received from the All-India Spinners' Association and the interim physical test reports on those samples received from the Kanpur laboratory were examined in detail by the members.

1.2 The Committee provisionally selected four samples out of these, viz. those from Maharashtra (ISI-2), Karnataka (ISI-3), Tirupur (ISI-6), and Punjab (ISI-9), and DECIDED to re-examine these four samples after dyeing, along with the final test report and select one or more out of them considered satisfactory. Mr. Krishnamurthi agreed to issue instructions to the Kanpur laboratory to proceed with scouring, dyeing, testing etc of these four samples only.

1.3 Mr. Lele suggested that as the cloth was manufactured on handloom with handspun yarn, adequate tolerances in the manufacturing particulars should be allowed.

1.4 After some discussion, it was DECIDED to allow a tolerance of 10 percent on the average value on the counts of warp and weft, ends and picks per inch and weight per square yard. The Committee also FELT it desirable that the twist multiplier for single yarn should be within the range from 3.5 to 4.5 and for double yarn from 2.5 to 4.5.

2. SILK KHADI

2.1 Silk khadi sample received from the All-India Spinners' Association was examined along with its interim test report. The Committee FELT that this sample would be unsuitable for the manufacture of National Flag and REQUESTED Mr. Lele to arrange for the manufacture of fresh samples, to the requirements given in Table I within tolerances decided upon in 2.2 below, and to forward them to the ISI Directorate for the scrutinv of the Committee. He promised to do so in a month's time.

Table 1-

Manufacturing Particulars of Silk Khadi

Counts in deniers		Ends per in.	Picks per in.	Wt per sq yd in oz	Breaking Strength on 2" x 7" strips	
Warp	Weft				Warp	Weft
					lb	lb
60s	60s	100	120	1.5	100	100

2.2 ....

2.2 A tolerance of 10 percent was AGREED upon on the manufacturing details of silk, as in the case of cotton khadi.

3. WOOLLEN KHADI

3.1 Five samples of woollen khadi received from Dr. Narayan and three samples received from Shree Gandhi Ashram, Meerut, were examined by the Committee along with the interim test reports.

3.2 Mr. Krishnamurthi said that the sample received from Dr. Narayan and labelled as ISI-19, vide Annexure III to the Agenda, gave a better appearance and better test results than the other samples.

3.3 The Committee APPROVED this sample and requested Dr. Narayan to forward 24 yards of this material to the ISI Directorate for further action. He promised to do so.

4. NEWAR KHADI

4.1 Cotton Newar three inches wide, forwarded by Mr. Lele, was NOT CONSIDERED SATISFACTORY by the Committee for use as sleeve of the flag.

4.2 There was some discussion as to whether any cloth could be substituted for the newar in case newar of the required width and strength was difficult to manufacture on hand-loom.

4.3 Mr. Krishnamurthi promised to look into the Defence Specifications for Tape Newar and Duck Cotton and give instructions direct to Mr. Lele as to how best a material for sleeve could be manufactured. This was AGREED TO.

5. OPTICAL ILLUSION

5.1 The points raised by Mr. Ranade regarding the relative proportion of the three stripes to be adjusted to give the impression of equality in size of the stripes of the flag were considered by the Committee.

5.2 Mr. Sarkar said that he had observed the apparent difference in the width of the stripes. None others had noticed this difference. A large flag measuring 12 x 6 ft obtained from the Manager, International Wool Secretariat was held up for the observation by the members. No member could confirm this illusion.

5.3 Dr. Verman explained that in the French Flag, the three stripes were in the vertical direction whereas in the National Flag of India the stripes were horizontal and when the flag was actually fluttering in the air, the probability of such illusion in this case might be remote.

5.4 The Committee DECIDED to drop the question and adhere to equal width of the three stripes, but if Mr. Sarkar and Mr. Hariharan after further observation found it necessary to pursue the matter, they might bring up the question again at the next meeting along with concrete proposal based on experiment.

6. ANY OTHER BUSINESS

6.1 Mr. Sarkar pointed out that the sleeve of the flag did not appear on any of the recognised drawings of the flags and therefore

it ....

it was proper to cover it up with the flag cloth. Majority of the members did not feel the necessity for incorporating this provision in the standard as all the flags flown in this country and elsewhere had the sleeves left uncovered and it was not conspicuous to the eye.

6.1.1 Mr. Krishnamurthi was REQUESTED to throw further light on this point at the next meeting after ascertaining the practice followed by the Ordnance Clothing Factories of the Defence Ministry.

6.2 Mr. Sarkar said that the shade of India green approved by the Committee in a previous meeting appeared to be lighter than the shade of dark green in the original drawing submitted by him to the Constituent Assembly. Mr. Krishnamurthi informed the Committee that the shade was matched to the sealed sample held in the custody of the Defence Ministry. As this sealed sample was taken as an authoritative guide for dyeing the shade, Mr. Sarkar did not wish to pursue the matter.

6.3 Dr. Verman drew the attention of the Committee to the resolution passed in the Constituent Assembly regarding the adoption of the National Flag wherein it was stated that the ratio of the width to the length of the flag should ordinarily be 2:3. In the drawings supplied by the Defence Ministry, he said, out of six different sizes of flags, 3 were in the ratio of 2:3 while the other three were in the ratio of 1:2. This, in his opinion, did not quite conform to the connotation of the word 'ordinarily.'

6.3.1 Mr. Krishnamurthi said that the sizes of the flags were under revision in the Defence Ministry and he would be in a position to give further information on the point in the next meeting.

6.4 It was DECIDED to hold the next meeting in the last week of March when it was expected that the dyed samples of cotton, silk and woollen khadi and the newar would be ready for the consideration of the Committee.

'SS'

5 NO 34

No.41/3/49-Public
Government of India
Ministry of Home Affairs

From

Shri A.V.Raman, M.A.
Under Secretary to the Government of India.

To

The Assistant Director, (Textiles)
Indian Standards Institution,
Block 11, Old Secretariat,
DELHI, 2

New Delhi-3, the 30 May, 1950.

Subject:- Sectional Committee for National Flag of India.

Dear Sir,

Please refer to your No. TDC 8/2A dated 2nd March, 1950 forwarding minutes given above Sectional Committee meeting held on 30th January 1950. We should be grateful to know when the next meeting, which was proposed for March 1950 likely to be held.

p.94 con 95

Yours faithfully,

Sd/- (A.V.Raman)
Under Secretary to the Government of India.

"Bhagwan"
26.5.50.

30/5

S. No: 35 (197 (190

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi • Phones : 6105 5419
• ~~BLOCK II~~ 19 University Road,
• ~~OLD SECRETARIAT~~
• DELHI 2, INDIA

Your Ref : 41/3/49-Public
Our Ref : TDC 8/2A
6 June 1950

Subject : National Flag of India Sectional Committee (TDC 8).

p96 Corr

Dy No. 3839/50 Pl
9/6

A.V.Raman Esq.,
Under Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

Dear Sir,

p 92-95 Corr
with pp
an 8/6/50
Public
PSA
6/6

With reference to your letter cited above, I have to inform you that four cotton khadi samples (approved by the National Flag of India Sectional Committee in its last meeting held on 30 January) and 12¼ yards of silk khadi (supplied by Mr. Lele of All India Spinners Association) are under test at the Kanpur laboratory of the Directorate of Technical Development Establishment. These test reports are being awaited.

Twentyfour yards of woollen bunting (Supplied by Dr. N.L.Narayan of Government of Rajasthan) were received on the 30 May. 1950. I am in correspondence with Mr.Krishnamurthy of the Defence Ministry and Dr. Nabar of University of Bombay and am trying to make arrangements for having the cloth tested and dyed.

As soon as the test reports are in my hands, I shall endeavour to call an early meeting to finalize the said specification.

Yours faithfully,

CL.

Assistant Director (Textiles)

Dy No: 3922/50 Ple
15/6 S. No: 36 (191) 198

grams: INDSTAND DELHI Phones:6105:5419

INDIAN STANDARDS INSTITUTION (ISI)

19, University Road,
Delhi 9 June 1950.

Ref: TDC/MK.
Sub: ASSISTANT DIRECTOR (TEXTILES).

To Members of Textile Division Council and
all its Sectional and Sub Committees.

Dear Sir,

I am glad to inform you that Mr. Maharaj Kishen, B.Sc.(Tex) (Mass), has been appointed Assistant Director (Textiles) and has taken over charge of the Textile Division in place of late Mr. C.P. Halkatti.

2. I trust that Mr. Maharaj Kishen will receive from you the same degree of co-operation and helpful advice as his predecessor had been getting. Kindly address to him direct all communications concerning the Textile Division Council.

Yours faithfully,

Lal C Verman
(LAL C. VERMAN),
Director.

Please put up with file re: standardisation of national flag.

VSM. AVRaman 14/6/50

Public.

P.S.A. 14/6

S NO 37 oc. -99- (192)

No.41/3/49-Public.
Government of India
Ministry of Home Affairs.
...

To

The Assistant Director (Textiles)
Indian Standards Institution,
19, University Road,
Delhi.

New Delhi-2, the 19th Aug.1950.

Subject:- Sectional Committee for National Flag of India.

- - -

Dear Sir,

p. 97 Cor

Please refer to your letter No: TDC 8/2 A dated the 6th June, 1950, on the subject cited above. We shall be grateful to be informed of the date of the next meeting of the Committee.

Yours faithfully,

Sd (A.V.Raman)
Under Secretary to the Govt.of India.

HRN.17.8.1950.

S.No. 38 (193) (100)

Gram: INDSTAND
DELHI

Phone: 40021/96

INDIAN STANDARDS INSTITUTION (ISI)

Your Ref: 41/3/49-Public p.99 corr
dt: 19.8.50
Our Ref: TDC 8/2A p.97 corr

19, University Road,
Civil Lines,
Delhi-8, 28 Aug 1950

Subject : National Flag of India Sectional Committee (TDC 8).

D. 5345/50—Pub
31-8-50

A.V. Raman Esq.,
Under Secretary to the
Government of India,
Ministry of Home Affairs,
New Delhi.

Dear Sir,

With reference to your letter cited above I have to inform you that the physical test report on Silk Khadi and the interim performance reports on flags made of Cotton and Silk under actual flying conditions were received from Mr. Krishnamurthy on 22 August 1950. The test reports on Woollen Khadi, spectophotometric values of colours of the cotton, silk, wool and the final∠report under actual flying conditions, are expected to be received by the end of September 1950.

I trust we will be able to finalize the specification in a meeting by the middle of October 1950.

I will keep you informed of further developments.

Yours faithfully,

∠performance

(Maharaj Kishen)
Assistant Director (Textiles)

'KC'

S.No 39

Grams: Indstand
Delhi.

Phone: 5921/4

D. 6407/50—Public
4—XI—50

INDIAN STANDARDS INSTITUTION (ISI)

Your Ref: 41/3/49-Public
dt. 19.8.50.
Our Ref: TDC 8/2A

19, University Road,
Civil Lines,
Delhi 8, 2 November 1950.

Subject: National Flag of India Sectional Committee (TDC 8)

A.V. Raman Esq.,
Under Secretary to the Government of India,
Ministry of Home Affairs,
New Delhi.

D/p

on
4/11/50
&
Pubw

PSA
4/11

Dear Sir,

p 100 corr

In continuation of this office letter of even number dated 28 August 1950, I write to inform you that the test reports from Mr. Krishnamurthi are still awaited. He has however been requested to expedite the matter.

2. The particulars of Duck Cotton Light undyed for sleeves, supplied by the Ministry of Defence have since been transmitted to Mr. Dwarka Nath Lele with the request to manufacture a 10 yards sample. The sample has not yet been received and he has also been requested to expedite despatch of the sample.

3. It is expected that full data would be available within two or three weeks.

Yours faithfully,

Balakrishnan

for Assistant Director(Textiles).

S. No. (40)

(195)

-102-

D.O.No.41/3/49-Public

New Delhi-2, the 16th November 1950.

Dear Shri Verman,

Subject:- National Flag of India Sectional Committee (TDC 8).

....

p.101 Corr

Will you please refer to your official letter No.TDC 8/2A of the 2nd November 1950 on the above subject? As you are aware, the matter has been pending for such a very long time and we are anxious that expeditious action should be taken so that the National Flag is standardized at a very early date. The report received from your end is not very encouraging and further deliberations of the Committee are being delayed for some reason or another. You will no doubt appreciate that ~~the Honourable~~ the President of India is likely to enquire any time as to what progress has been made in the matter of standardization of the National Flag particularly with regard to the use of Khadi material and we shall certainly be in a very awakward position to meet his queries. We should therefore be grateful to know in detail what is really causing the delay and as to how quickly the matter can be finalized. You may also please use your good offices to complete the task as early as possible.

A very early reply is requested.

Yours sincerely,

Sd.

(A.V.Raman)

Shri Lal C. Verman,
Director,
Indian Standards Institution,
19, University Road,
Civil Lines, DELHI.

Sr. No. (41) (146) 1103

IST

INDIAN STANDARDS INSTITUTION

Member, International Organization for Standardization (ISO)

Grams : Indstand
Delhi
Phones : 6105
~~5419~~
19 University Road
Civil Lines
Delhi 8, India

D. 6664/50 – Public
20-XI-50

Your Ref :

Our Ref : TDC 8/2A.

18 November 1950.

Subject : STANDARDIZATION OF NATIONAL FLAG.

My dear Raman,

p. 102 curr

Thank you very much for your D.O. letter No. 41/3/49-Public dated the 16th November 1950, concerning the standard on national flag of India. I enclose for your information a copy of an office note giving up-to-date history of the work on this project.

* pp 104-105 infra

2. You will see that we are chiefly dependent on the Defence Department Kanpur Laboratory for carrying out most of the experimental work. A good part of this has been done, but a great deal still remains to be done.

3. Before we hold the next meeting of the Committee, it seems desirable that we may at least get full data so far as the cotton flag is concerned. It may be possible to separate the standard on silk and woollen flags from that on cotton. If the Committee agree to this, we might have at least shown some progress. But even the data on cotton flag is not quite complete as indicated in the note, and we are doing everything possible to expedite the Kanpur Laboratory.

AM
29/11/50

USA
29/11

4. It appears to me that it may be well worthwhile for the Home Ministry to request the Defence Ministry to expedite this work. Perhaps a D.O. letter from you or from the Secretary will be helpful in this connection. It would not be quite right for me to write such a D.O. because it might be interpreted as a complaint against just those people who are actually doing their best to help us. They, no doubt, have their hands full with other work requiring higher priority, but a letter from your side would no doubt help.

With best regards,

Yours sincerely,

Lal C Verman

(Lal C. Verman),

Encl:1.

A.V. Raman, Esq.,
Under Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

VSM.

NATIONAL FLAG.

The work of preparation of standard on National Flag of India made of mill-made cloth was taken up on 28 January 1949. When the specification on this basis was almost complete, we were requested on 21 Jly 1949, to formulate the standard prescribing exclusive use of hand-spun yarn and hand-woven cloth.

National Flag of Cotton Khadi - In spite of great difficulties and at the cost of utmost pains and great deal of labour, we were able to submit on 19 and 26 October 1949, nine samples of cotton khadi to Mr. M. Krishnamurthi, IOS, Directorate of Technical Development, Army Headquarters, New Delhi, the official representative of the Ministry of Defence, Government of India on TDC 8, for tests at the Technical Development Establishment, Textiles and Clothing, Kanpur. The test reports were delayed at that end in spite of this Directorate's four reminders dated 3-12-49, 9-12-49, 27-12-49 and 4-1-50. The test reports received on 21 February 1950 were incomplete. They did not include spectrophotometric values of the coloured materials.

In spite of this, a meeting of the Sectional Committee concerned was called on 30 January 1950. Four samples out of the 9 mentioned above, were approved and Mr. Krishnamurthi was asked on 8 March 1950 to expedite the (1) dyeing of the approved samples, (2) making the samples into flags and (3) the submission of spectrophotometric values of the dyed materials. Reminders were issued on 13-5-50, 16-5-50, 18-7-50, 3-8-50, 29-8-50, 26-9-50, 11-10-50 and 30-10-50 i.e. 8 in all. As a result of the first four reminders, the Kanpur Laboratories have dyed the approved samples and made them into Flags which were received on 22-8-50.

However, it is to be regretted that they have not been able to find it possible so far to submit spectrophotometric values of the dyed material used in the Flags. These values are essential for the prescription and description of the colour to be used in the Flags. This task was assigned to them on 12 August 1949.

National Flag of Silk Khadi - Silk Khadi sample, manufactured according to the particulars approved by the Sectional Committee on 30 January 1950, was received from Mr. Dwarka Nath Lela, representative of the All India Spinners' Association, Wardha, on 21 March 1950 and was sent to Mr. Krishnamurthi on the same day for the same purposes as for cotton khadi. Five reminders were sent on 12-4-50, 30-5-50, 16-6-50, 18-7-50 and 3-8-50. Test report and sample flags were received on 22-8-50, but Mr. Krishnamurthi reported that the silk sample was not suitable for National Flag. Trials made of silk flag were therefore deferred in consultation with the Chairman of TDC 8.

National Flag of Woollen Khadi - Sample of Woollen Khadi for which the Technical Development Establishment, Textile and Clothing, Kanpur had no dyeing facilities, were dyed by Dr. G.M. Nabar, Department of Chemical Technology, Bombay University, and sent to Mr. Krishnamurthi for the same purposes as for cotton khadi, on 18 July 1950. A reminder was issued on 3 August 1950 and he promised to send the test

reports ....

reports and samples by the end of September 1950. The reports and sample flags have not yet been received in spite of 3 reminders on 26 September, 11 and 30 October 1950.

Newar Khadi for Sleeves of National Flag - Mr. Krishnamurthi promised to furnish the manufacturing particulars of Tape Newar and Duck Cotton. After issuing 3 reminders on 30 May, 16 June and 3 August 1950, the particulars were received on 22 August 1950. These particulars were passed on to Mr. Dwarka Nath Lela for manufacturing a sample at All India Spinners' Association's Centres. The sample has been received now and is being passed on to Mr. Krishnamurthi for testing purposes.

18-11-50

ARM/

Sr. No. (42)

(199)

(106)

D. 6926/50 — Pub
4 — XII — 50

INDIAN STANDARDS INSTITUTION(ISI)

Grams:
'INDSTAND'
DELHI

Phone:5921/4

Our Ref: TDC 8/2A

19, University Road,
Civil Lines,
Delhi-8, 2 December 1950.

Subject: Fifth meeting of the National Flag of India Sectional Committee (TDC 8).

Chairman and Members of the National Flag of
India Sectional Committee (TDC 8), and
Invitees.

Dear Sir,

In concurrence with the wishes of the Chairman of the National Flag of India Sectional Committee (TDC 8) and in anticipation of the fulfilment of the undertaking given to this Directorate by Mr. M. Krishnamurti of the Directorate of Technical Development, MGO Branch, Army Headquarters India, New Delhi, to complete the supply of test reports on National Flag materials well within time, the fifth meeting of the National Flag of India Sectional Committee (TDC 8) is hereby called to be held at 10.30 A.M. on 22 December 1950, in Room No. 8A, South Block, Central Secretariat, New Delhi.

2. I trust that you will find it convenient to attend.

3. Agenda for the meeting shall follow.

Yours faithfully,

Maharaj Kishen

(Maharaj Kishen)
Assistant Director(Textiles)

P/p

A/n
4/12/50
Public

R.S.A
4/12

Mr. A. V. Raman

'SS'

Sr. No. 43

200

D. 7076/50 – Public
9 – XII – 50

–107–

INDIAN STANDARDS INTITUTION (ISI)

P8A
9/12

19, University Road,
Civil Lines,
DELHI-8.

No.TDC 8/2A.

4/8 December 1950.

Subject: Fifth Meeting of the National Flag of India Sectional Committee (TDC 8).

A.V. Raman Esq.,
Under Secretary to the
Government of India,
Ministry of Home Affairs,
NEW DELHI.

You were good enough to agree over the telephone on Saturday last to my proposal to hold the next meeting of the National Flag of India Sectional Committee (TDC 8) in one of your rooms i.e. in Room No.8A, South Block, Central Secretariat, at 10.30 a.m. on the 22nd of December 1950.

PP
an
9/12/50
put up

I write this to thank you and to formally confirm the arrangement made with you.

Yours faithfully,

Maharaj Kishen

(Maharaj Kishen)
Assistant Director(Textiles).

ARM/

Pct / 12/M Sr. No. 44

(201)

INDIAN STANDARDS INSTITUTION — 108 —

Member, International Organization for Standardization (ISO)

Grams : Indstand Delhi • Phones : 6105 ~~5412~~ • 19 University Road • Civil Lines • Delhi 8, India

Your Ref : --

Our Ref : TDC 8/2A

12 December 1950.

Subject : NATIONAL FLAG OF INDIA

D. 7137/50 — Public
13 — XII — 50

My dear Raman,

-- I enclose herewith a copy of my letter of even number dated 7 December 1950, addressed to Mr. M. Krishnamurthi and invite your special attention to its first 5 paragraphs. ✓ pp 109-110

2. As you probably know ~~that~~ I have recently joined the ISI. I do not, hence, know the degree of importance to be attached to the colour values of the Flag presented to the Consembly by the Hon'ble Pandit Jawharlal Nehru, Prime Minister of India, in July 1947. Seeing that the spectrophotometric values of the Flag were subsequently determined experimentally in the Kanpur Laboratory, I do not think I would be wrong in saying that some cognizance has to be taken while drawing up specification of the National Flag of India. As I said in the letter to Mr. Krishnamurthi, this would depend on whether or not the Flag presented to the Consembly was in fact tested for spectrophotometric values. There is nothing on my files which would help me in coming to a definite conclusion on this point. ackn 13/12/50

3. Apart from Mr. Krishnamurthi, you are the only other member of the Sectional Committee who is well placed to find out the actual facts of the situation. I shall be grateful if you will kindly collect and send me the information well before the time of the meeting.

4. Another point where you could be helpful would be to find out the degree of importance the Government is likely to attach to the spectrophotometric values of the dyed panels in the Flag presented to the Consembly in 1947. The Flag having been formally presented to the Consembly, I think that the Government would want the specification, now being formulated, to stipulate colour values identical with the ~~similar~~ colour values of the said Flag.

5. I am writing this personal letter to you so that it may come to your hands as soon as possible.

Yours sincerely,

Maharajkishen

(Maharaj Kishen)

A.V.Raman, Esq.,
Under Secy. to the Govt. of India,
Ministry of Home Affairs,
South Block, Room No.8A,
NEW DELHI.

Encl: 1.

'SS'

68A

(202)

-109-

INDIAN STANDARDS INSTITUTION(ISI)

XXXX
19, University Road,
Civil Lines,
Delhi-8, 7 December 1950.

--

TDC 8/2A

National Flag of India.

7136/50 — [illegible]
13 — XII — 50

M. Krishnamurthi, Esq.,
Directorate of Technical Development,
M.G.O. Branch, Army Headquarters,
NEW DELHI.

Dear Sir,

I am in receipt of your letter No.2501/137/TDC8/MG/TD-8, dated 30 November 1950, which reached this end on the 4th instant.

2. I understand that the spectrophotometric values of the green, saffron and white portions of the Flag presented to the Consembly on 22 July 1947, during the course of a resolution re: the National Flag, are as under:

	Trichnomatic Values			Brightness %	Dominant Wave length milli micro.
	X(R)	Y(y)	Z(B)		
Saffron	0.538	0.360	0.102	21.5	599 W.
White	0.313	0.319	0.368	72.6	-
Green	0.288	0.395	0.317	8.9	533

Illuminant C.

These values, I further understand, were determined experimentally by your Kanpur Laboratories.

3. Spectrophotometric values of green and saffron portions of the Cotton Khadi Flags made by your Kanpur Laboratories for the purposes of the National Flag of India Sectional Committee (TDC 8), not only differ from the values given in para 2 but also from each other.

4. I believe, that the Sectional Committee TDC 8, would want to specify, if possible, spectrophotometric values of the dyed portions of the Flag to be identical with values stated in para 2 above. This, of course, would depend on whether or not

the ....

the Flag presented to the Consembly (a) was in fact tested for spectrophotometric values and (b) had the stated values.

5. I shall be glad to know if you can help in clarifying the factual position.

6. Also, I believe that the Sectional Committee TDC 8 would not like to specify such spectrophotometric values for Cotton Khadi National Flags as would differ from similar values approved and specified for Flags used by the Defence Forces. It is unlikely that the latter values differ from the values stated in para 2 above. However, if they do vary, the Sectional Committee would, it is believed, like to make its own decision in cognizance with the spectrophotometric values of the dyed portions of Flags as used by the Defence Forces. I shall be glad if you will kindly send me the values prescribed by the Defence Forces. You will recall that I called for this information as long ago as 16 June 1950. The information is still awaited. It is possible that Flags for the Defence Forces are made on the basis of shades to match approved dyed samples of bunting. In that case, I shall be grateful if you would kindly lend for the use of the Sectional Committee either the approved sample or a ready-made Flag.

7. I understand (I had not joined the ISI then) that the work of scouring and dyeing of cotton khadi and of making the material into Flags, and testing them was entrusted to your Laboratories with in mind, firstly, that your Laboratories were familiar with the spectrophotometric values of colours in the Flag (as approved by the Consembly) and secondly, that your Laboratories had the facilities to duplicate those colours. Now that the spectrophotometric values of the Cotton Khadi Flags made for the purposes of the Sectional Committee TDC 8 differ from the values mentioned in para 2, I shall be glad to have your confirmation that (i) it is not possible to dye cotton khadi to obtain the values stated in 2 above, or (ii) that the deviation between the two values is of a negligible order. The decision on the order of deviation, disclosed by your report of 30 November 1950, will have to be taken by the Sectional Committee on your report on this aspect, the Flag presented to the Consembly in 1947 being not available to the Sectional Committee for comparison with the Cotton Khadi Flags.

Yours faithfully,

sd/- (Maharaj Kishen)
Assistant Director(Textiles)

Copy to: ✓ A.V. Raman, Esq.,
Under Secretary to the Govt. of India,
Ministry of Home Affairs,
Room No. 8A, South Block, NEW DELHI.

'SS'

Assistant Director(Textiles)

Sr No. 45

(204)

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PSA
[illegible]

Grams: INDSTAND
DELHI

Phone: 5921/4

INDIAN STANDARDS INSTITUTION (ISI)

19 University Road,
Civil Lines,
Delhi-8, 11 December 1950.

Our Ref: TDC 8/2 A

Subject: FIFTH MEETING OF THE NATIONAL FLAG OF INDIA SECTIONAL COMMITTEE (TDC 8)

Chairman & Members of the National
Flag of India Sectional Committee
(TDC 8), and invitees.

Dear Sir,

p. 106 Corr

In continuation of my letter of even number dated 2 December 1950, I am sending herewith a copy of Agenda for the fifth meeting of the Sectional Committee for National Flag of India (TDC 8), to be held on 22 December 1950 in Room No. 8A, South Block, Central Secretariat, New Delhi.

pp 112-128

2. There is a liklihood of 22 December being declared a holiday. It is proposed to hold the meeting irrespective of whether the day is declared a holiday or not.

3. I trust you will make it convenient to attend the meeting.

13/12/50

Yours faithfully,

Maharaj Kishen

(Maharaj Kishen)
Assistant Director (Textiles).

Encl:1

DNS:

Mr A.V. Raman

(205)

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INDIAN STANDARDS INSTITUTION(ISI)

AGENDA
for the
FIFTH MEETING
of the
SECTIONAL COMMITTEE FOR THE NATIONAL FLAG OF INDIA
(TDC 8)
to be held
at 10.30 A.M. on Friday, 22 December 1950,
in Room No. 8A, South Block, Central Secretariat,
New Delhi.

0. GENERAL

0.1 Opening remarks by Chairman.

1. CONFIRMATION OF THE PROCEEDINGS OF THE 4TH MEETING

1.1 TDC 8 may confirm the proceedings of its fourth meeting held on 30 January 1950. The proceedings were circulated to all members by the ISI Directorate on 2 March 1950.

2. COMPOSITION

2.1 The present composition of TDC 8 is given in Annexure I (Page 5).

2.2 The following names may be considered by TDC 8 for the purpose of co-option:

1) Dr. N.L. Narayan
representing the Govt. of Rajasthan;

2) Mr. Vichitra Narain Sharma,
representing Shree Gandhi Ashram, Meerut

3. SPECIFICATION FOR NATIONAL FLAG

3.1 As the selection of suitable silk and wool khadi for the Flag is likely to be delayed (see Items 11 and 12 of the Agenda) it is proposed to finalize the specification for the National Flag involving the use of cotton khadi alone at present, and prepare specifications involving the use of silk and wool khadi separately later.

4. COTTON KHADI

4.1. In accordance with the decision of TDC 8 in its last meeting cotton khadi samples received from Maharashtra, Karnataka, Tirupur and Punjab were dyed and tested at the Kanpur Laboratory. Four Flags were made out of these 4 samples and they were also tested under actual flying conditions in the Laboratory.

4.2 Dyed sample cuttings and the Flags manufactured out of these approved materials will be tabled at the time of the meeting. In this connection, it was pointed out by Mr. Krishnamurthi that the Navy blue shade of the wheel screen-printed on the above mentioned Flags was not the correct standard shade and further attempts could not be made for want of material. Spectrophotometric values of navy blue colour have also been called for from Mr. Krishnamurthi for inclusion in the standard.

Shade to be
supplied by Mr K
shd be taken as
standard.

5. MATERIAL FOR SLEEVE

5.1 Constructional details of light cotton Duck, grey, furnished

by ....

by Mr. Krishnamurthi were supplied to Mr. Lele for the manufacture of fabric for sleeve, as directed in the last meeting.

5.1.1 The sample made to the specification by Mr. Lele was forwarded to Mr. Krishnamurthi for test.

5.1.2 Test report, received from Mr. Krishnamurthi on the sample, is given in Annexure II(Page 6)

5.1.3 TDC 8 may consider whether the material is acceptable. Cuttings of the sample will be tabled at the meeting.

6. COVER FOR SLEEVE

6.1 TDC 8 requested Mr. Krishnamurthi in its last meeting to throw further light on the point raised by Mr. Sarkar regarding the cover for sleeve with cloth used in the body of the Flags.

6.1.1 Observations of Mr. Krishnamurthi as communicated to the ISI Directorate are given below:

agreed to

> "It is considered unusual to cover the sleeve with the Flag material. This is not therefore provided for in our Drawing. It is, therefore, recommended that the question of covering the sleeve be dropped."

6.1.2 TDC 8 may issue directives.

7. SIZE OF FLAGS

7.1 The Revised Drawing (Army Specification) of the Flag lent by Mr. Krishnamurthi in compliance with the request of TDC 8 in its last meeting will be tabled at the meeting.

7.1.1 TDC 8 in its second meeting had decided as under:

> "The ratio of width to length shall be 2:3 or 1:2 and the dimension of the Flags shall be as given in Figure 1. There shall be six sizes of Flags in all including the Flag for Motor Cars." (Please see 2.1.5(d) of the proceedings).

This decision was based on the drawing previously supplied by the Defence Ministry.

5 or sizes
21' : 14',
12' : 8',
6' : 4',
3' : 2
9in : 6in

7.1.2 Now that the Army Specification stipulates only 5 sizes and only one ratio (2:3) for the Flags, TDC 8 may reconsider the decision arrived at in its second meeting.

Shall ordinarily be of size 2:3

8. WATER REPELLENCY OF FLAG MATERIALS

8.1 TDC 8 in its second meeting considered the desirability of introducing suitable provision for making the Flag water repellent and decided to obtain the reactions of the Defence Ministry to this proposal.

8.1.1 Mr. Krishnamurthi, who was consulted in this matter, has stated as follows:

> "It may be mentioned that neither the specification for the basic worsted bunting nor the specification for various flags used by the Army/Navy stipulate a water repellency treatment. Moreover the bunting materials used in U.K. for the manufacture of Flags are not also given a water repellency treatment. As such we are unable to comment upon the merits or de-merits of this treatment."

~~Drop~~
Leave it for present
Dr. Nabar may make experiments

8.1.2 TDC 8 may issue directives.

8. ....

9. OPTICAL ILLUSION

~~width~~ sizes of stripes

9.1 The points raised by Mr. Ranade regarding the relative proportion of the three stripes to be adjusted to give the impression of equality in size of the stripes of the Flag were considered by TDC 8 in its last meeting and it was decided to adhere to equal width of the three stripes. However, Mr. Sarkar and Mr. Hariharan were invited to bring up the question again if they found it necessary to pursue the matter.

9.1.1 Mr. Sarkar and Mr. Hariharan may express their views.

10. TEST REPORTS

10.1 The test reports on the samples received from Kanpur Laboratory through Mr. Krishnamurthi are given in Annexures III to V(Pages 7 -9)

a) Test report on the Constructional details of Cotton Khadi - Annexure III
b) Spectrophotometric values of colours on Cotton Khadi Annexure IV
c) Trial report (under actual flying conditions) on the Flags (Cotton Khadi) - Annexure V.

10.1.1 TDC 8 may scrutinize the test reports and select one or more samples considered satisfactory for the manufacture of the National Flag.

10.2 A draft specification for the National Flag of India with Cotton khadi prepared by the ISI Directorate is given in Annexure VI∠ for scrutiny and approval , after such additions and alterations as may be found necessary. ∠(Page 10)

10.3 The Rules and Regulations of the ISI provide that where the subject matter of a draft specification is considered to be of non-controversial nature or where the need for the standard is considered urgent, the Division Council, on the recommendation of the Sectional Committee concerned, may dispense with the circulation of the draft for three months in specific cases.

10.3.1 TDC 8 may consider desirability of recommending to the Textile Division Council to dispense with the circulation of the draft specification.

11. SILK KHADI

11.1 The silk khadi received from Mr. Lele of the All India Spinners Association on 21 March 1950, was forwarded to Mr. Krishnamurthi for onward transmission to the Kanpur Laboratory for test.

11.1.1 The test report received from Mr. Krishnamurthi on the sample is given in Annexure VII (Page 16)

11.1.2 Mr. Krishnamurthi was of the view that this sample also was not considered suitable for the National Flag and he enquired whether trials should be carried out on the Flag made out of this material.

11.1.3 The matter was referred to the Chairman, TDC 8, who was of the opinion that it should be placed before the Sectional Committee for consideration. Mr. Krishnamurthi was informed accordingly.

In a ....

11.2 In a subsequent letter to this Directorate Mr.Krishnamurt stated as follows:

> "The C.S.D.T. & C. has since stated that khadi silk received with your letter of 12 April 1950 although superior to previous samples is considered unsuitable for manufacture of Flags due to uneven pickings observed throughout the piece. Flags made from this material will not stand the atmospheric conditions and would deteriorate rapidly. Sample Flags have been made for trial in actual flying conditions but further action will now be held in abeyance in view of your letter TDC 8/2A dated 5 October 1950."

11.2.1 Under instructions from Mr. Lele, the Deputy Director of Industries (Cottage and Small Scale) West Bengal, recently forwarded to this Directorate another set of 3 samples of Silk Khadi. These have been forwarded to Mr. Krishnamurthi for test on 11 December 1950. The test report, if received in time, will be tabled at the meeting.

11.2.2 TDC 8 may issue directives.

12. WOOL KHADI

12.1 As facilities for dyeing wool khadi do not exist in the Kanpur Laboratory the sample of wool khadi received from Dr. Narayan was dyed at the Department of Chemical Technology, Bombay, by Dr. Nabar and the dyed sample was forwarded to Mr. Krishnamurthi for tests.

12.1.1 Test report received from Mr. Krishnamurthi is given in Annexure VIII (Page 17)

12.1.2 TDC 8 may consider the test report and issue directives. Cuttings of the dyed sample will be tabled at the meeting.

13. ANY OTHER BUSINESS

ANNEXURE I
(Item 2)
Composition of the National Flag Sectional Committee
(TDC 8)

NAME	REPRESENTING
Mr. Bharat Ram (Chairman)	Delhi Cloth and General Mills Co.Ltd.
Mr. G.E.Longdin	New Egerton Woollen Mills
Dr. G.M. Nabar	Council of Scientific and Industrial Research
Mr. M. Krishnamurthi	Ministry of Defence
Mr. Randhir Singh	Ministry of I & S (DGI & S)
Mr. A.V. Raman	Ministry of Home Affairs
Shri Dwarka Nath Lele	All India Spinners' Association

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ANNEXURE II
(Item 5)

Test Report on Cotton Duck-Grey

R H 80 percent at 64°F

Counts (designed)		Twist per inch		Ends per inch	Picks per inch	Weight per Sq Yd (oz)	Min Breaking Strength 4" x 7"	
Warp	Weft	Warp	Weft				Warp lb	Weft lb
17s/3	18s/3	12	11	38	30	9.809	216	181
				40	34	To be calculated	240	180

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ANNEXURE III

(Item 10)

Cloth	Finish	Width in.	Threads/1 in. Warp	Threads/1 in. Weft	Counts of yarn Warp	Counts of yarn Weft	Weight per sq yd oz	Breaking strength (4" x 6$\frac{5}{8}$") bet. grips cond. Warp	Breaking strength (4" x 6$\frac{5}{8}$") bet. grips cond. Weft	Twist multiplier (doubling) Warp	Twist multiplier (doubling) Weft	Shrinkage Warp %	Shrinkage Weft %	Visual Examination
Khadi Cotton														
ISI-S2 Maharashtra	Loomstate	33.2/8	40	40	2/25s	2/21s	5.0	138	153	4.4	3.4	-	-	
	Scoured	31.2/8	42	45	-	-	5.1	140	150	-	-	3.4	6.3	Picking is uneven.
	Dyed	30.6/8	43	45	-	-	5.4	-	-	-	-	2.0	1.6	
ISI-S3 Karnataka	Loomstate	27.3/8	39	42	2/25s	2/27s	5.7	138	170	2.4	3.1	-	-	
	Scoured	26.3/8	41	45	-	-	5.7	130	185	-	-	5.2	3.6	Picking & selvedges are uneven.
	Dyed	26	42	45	-	-	5.8	-	-	-	-	2.2	1.5	
ISI-S6 Tirupur Selected.	Loomstate	26.5/8	40	39	2/20 2/21s	2/20 2/20s	5.2	155	133	5.1	4.6	-	-	
	Scoured	26	41	40	-	-	5.8	165	113	-	-	2.4	2.3	Picking and selvedges are uneven.
	× Dyed	26	44 42	42 40	-	-	Calculate 5.9	- 180	- 170	-	-	maximum 2.0	0.0	
ISI-S9 Punjab	Loomstate	27	41	37	2/20s	2/18s	5.7	188	190	1.6	1.1	-	-	
	Scoured	26.1/8	42	38	-	-	6.2	182	187	-	-	5.5	3.2	Sample contains irregular selvedges.
	Dyed	25.7/8	43	40	-	-	6.6	-	-	-	-	0.8	1.0	

Annexure IV

(Item 10)

Test report on the spectrophotometric values of colours (Cotton Khadi)

Sample No.	Reflectance percent	X	Y	Z
ISI-S2	12.8	.536	.353	.111
ISI-S2	6.5	.316	.357	.326
ISI-S3	12.6	.484	.345	.171
ISI-S3	4.9	.248	.246	.507
ISI-S9	11.9	.458	.313	.228
ISI-S9	6.1	.334	.339	.327
ISI-S6	16.0	.510	.348	.141
ISI-S6	11.3	.225	.321	.454

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ANNEXURE V
(Item 10)
Trial Report (under actual flying conditions)
on the flags (Cotton Khadi)

Description of the flag		Period Exposed		Present condition of the flag
Material	Size	From	To	
1. Khadi Cotton (From Maharashtra)	3' x 2'	15-5-50	31-7-50	Fabric in tact. No appreciable change in the shades
2. Khadi Cotton (From Karnataa)	"	"	"	-do-
3. Khadi Cotton (From Tirupur)	"	"	"	-do-
4. Khadi Cotton (From Punjab)	"	"	"	-do-

Annexure VI
(Item 10.2)
Draft
Indian Standard
Specification for the National Flag of India (Cotton khadi)

FOREWORD

The Hon'ble Mr. Jawaharlal Nehru presented to the Constituent Assembly of India on 22 July 1947, two flags, one of silk and the other of cotton khadi, specially designed and manufactured for adoption as the National Flag of India. He moved the following Resolution:

> "Resolved that the National Flag of India shall be a horizontal tricolour of deep saffron (kesari), white and dark green in equal proportion. In the centre of the white band, there shall be a Wheel in Navy blue to represent the Charkha. The design of the Wheel shall be that of the Wheel (Chakra) which appears on the abacus of the Sarnath Lion Capital of Asoka.
>
> "The diameter of the Wheel shall approximate to the width of the white band.
>
> "The ratio of the width to the length of the Flag shall ordinarily be 2:3."

The motion was adopted, the whole assembly standing.

The Resolution passed in the Constituent Assembly on 22 July 1947 did not furnish full details regarding the quality of the cloth, and other particulars required for the manufacture of flags. Hence the necessity arose for the preparation of a self-contained specification for the National Flag of India.

The Army Headquarters, who had drawn up specifications for the National Flag for the use of the Army, suggested to the Indian Standards Institution to issue a standard for the National Flag on the basis of the one drawn up by them.

The Government of India in the meanwhile expressed a desire that the cloth used for the manufacture of the Flag should be made out of hand-spun and hand-woven khadi. In agreement with the desire of the Government of India, it was decided to evolve a standard of the National Flag involving the use of hand-spun and hand-woven cotton, wool and silk fabrics.

This standard deals only with the National Flag made of cotton khadi. National Flags made out of wool and silk will be dealt with separately.

In the preparation of this standard considerable assistance has been derived from the All India Spinners' Association, Wardha, Government of Rajasthan and the Directorate of Technical Development, Ministry of Defence, New Delhi. The assistance so rendered is acknowledged.

1. SCOPE

1.1 This standard prescribes the specification of the materials used in and the method of manufacture of the National Flag of India.

2. MATERIALS

2.1 Yarn - Yarn used for making bunting and cotton Duck shall be handspun and of the count and with the twist as given

in ....

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in Table I below:

TABLE I PARTICULARS OF YARN

	Count Warp	 Weft	Twist multiplier for single yarn	TPI	Twist multiplier for double yarn	TPI
For Cotton Bunting		-	4		3.5	(8-9) 15/17 ± 2
For Cotton Duck			4		3.5	

Tolerance in the count of warp and weft yarn shall be limited to ± 10 percent. Tolerance in the twist multiplier for single yarn shall be limited to ± 0.5. Tolerance in the twist multiplier for double yarn shall be limited to ± 1.

Count of yarn and turns per inch of single and folded yarn shall be determined by the method described in IS: -1950 Method for the Determination of Cotton Yarn Count(or yarn melidity in gK) (Doc: TDC 1(37)) and IS: -1950 Method for the Determination of Twist in Cotton Yarn (Doc:TDC 1(38)) respectively.

2.2 Cotton Bunting - The bunting shall be hand-woven, of plain weave and fairly free from flaws and other defects. It shall be manufactured from yarn as specified in 2.1.

2.2.1 Construction - Both dyed and bleached bunting shall conform to the constructional details given in Table II.

TABLE II CONSTRUCTIONAL DETAILS OF COTTON BUNTING

Ends per in.	Picks per in.	Weight per sq. yd	Breaking Strength on 2" x 7" strips Warp	 Weft

Length and width of the bunting [illegible] shall be according to the agreement between the vendor and the vendee.

Ends and picks, weight, breaking strength and length and width shall be determined by the method described in IS: -1950 Method for the Determination of Ends and Picks in Woven Cotton Fabrics (Doc: TDC 1(40)), IS: -1950 Method for the Determination of Weight per Unit Area or Unit Length of Cotton Fabrics (Doc: TDC 1(42)), IS: -1950 Method for the Determination of Breaking Load (Doc: TDC 1(43)) and IS: -1950 Method for the Determination of Cotton Fabric Dimensions (Doc: TDC 1(41)) respectively. However, a tolerance of 10 percent in the above values shall be permitted.

2.2.2 Dyeing - The material required for the India Saffron and India Green panels of the Flag shall be piece dyed with dyes necessary to produce the required colour and shade which shall be fast to light and wash. The spectrophotometric values of

colour ....

colours including Navy blue colour for Chakra shall conform to the values given in Table III below:

TABLE III SPECTROPHOTOMETRIC VALUES OF COLOURS

The dyed fabric shall have at least class 6 light fastness when tested according to the method described in Appendix A.

The dyed fabric shall not change in shade or show any sign of bleeding when tested according to the method described in Appendix B.

2.2.3 Shrinkage - The shrinkage in fabric, warpway or weftway, shall not exceed 2 percent when tested according to the method described in Appendix C.

2.2.3 The bunting shall be thoroughly scoured and then laundered five times and dried thoroughly between launderings before dyeing or bleaching.

2.3 Cotton Duck/Grey - The duck shall be made of unsized yarn as specified in 2.1 and used in the loom state without dressing. The single and folded yarns shall be twisted uniformly. The duck shall be fairly free from weaving flaws and other defects.

2.3.1 Construction - The duck shall be hand-woven, of plain weave and shall conform to the particulars given in Table IV.

TABLE IV CONSTRUCTIONAL DETAILS OF COTTON DUCK

Ends per in.	Picks per in.	Weight oz/sq yd	Breaking Strength on 2" x 7" strips	
			Warp	Weft
			lb	lb

Length and width of the cotton duck shall be according to the agreement between the vendor and the vendee.

Ends and picks, weight, breaking strength and length and width shall be determined by the method described in IS: -1950 Method for the Determination of Ends and Picks in Woven Cotton Fabrics (Doc: TDC 1(40)), IS: -1950 Method for the Determination of Weight per Unit Area or Unit Length of Cotton Fabrics (Doc: TDC 1(42)), IS: -1950 Method for the Determination of Breaking Load (Doc: TDC 1(43)) and IS: -1950 Method for the Determination of Cotton Fabric Dimensions (Doc: TDC 1(41)) respectively. However, a tolerance of 10 percent in the above values shall be permitted.

2.4 Cotton Sewing Thread - The cotton sewing thread shall be manufactured from carded or combed Egyptian cotton. The thread shall be well spun, evenly twisted, free from knots, short lengths and other defects.

2.4.1 ....

2.4.1 Construction - The thread shall conform to the particulars given in Table V.

TABLE V CONSTRUCTIONAL DETAILS OF COTTON SEWING THREAD

Count	Direction of Twist	Length of finished thread per lb (per kg)	Single thread Breaking Strength lb(kg)
36s/6	36Z/2Z/3S	4500 yd(9070 m)	5(2.25)

Note: Single yarns of 36s Count shall be of 'Z' twist. Two such single yarns of 36s shall then be twisted in 'Z' direction, and finally three such two-fold yarns shall be twisted in 'S' direction.

The count of cotton sewing thread shall be determined by method described in IS: -1950 Method for the Determination of Cotton Yarn Count (Doc: TDC 1(37)).

Single thread breaking strength shall be determined by the method described in Appendix D.

2.4.2 Dyeing - The cotton sewing thread shall be dyed with dyes necessary to produce the India Saffron and India Green matching the dyed panels of the Flag. The colours shall be fast to light and wash.

The dyed yarn shall have at least class 6 light fastness when tested according to the method described in Appendix A.

The dyed yarn shall not change in shade or show any sign of bleeding when tested according to the washing method described in Appendix B.

2.5 Flax Thread or Cotton Sewing Thread (For sewing in cord in the sleeve) - Flax thread or cotton sewing thread shall be manufactured from good quality flax or cotton. It shall be well spun, evenly twisted, free from knots, short lengths and other defects.

2.5.1 Construction - The flax thread or cotton sewing thread shall conform to the particulars given in Table VI.

TABLE VI CONSTRUCTIONAL DETAILS OF FLAX THREAD AND COTTON SEWING THREAD

	Cord	Direction of twist	Length yd(m)	Weight gr(g)	Single thread breaking strength lb(kg)
Flax thread	3 cord	Z/3S	300(274)	800(52)	7(3.17)
Cotton sewing thread	22s/9	22Z/3Z/3S	1800(1646)	7000(453.6)	13(5.89)

The single thread breaking strength shall be determined by the method described in Appendix D.

2.6 ....

2.6 Hemp Cordage - Hemp cordage shall be manufactured from good quality hemp. Hemp shall be clean and free from impurities.

2.6.1 Construction - The hemp cordage shall conform to the particulars given in Table VII.

TABLE VII CONSTRUCTIONAL DETAILS OF HEMP CORDAGE

Size in. (cm)	No. of threads	No. of strands	Direction of twist	Breaking Strength lb(kg)	Length of coil ft(m)	Weight of coil lb(kg)
¾(1.9)	12	3	Z/12S/3Z	336(152)	720(219)	12(5.5)
1(2.5)	9	3	Z/9S/3Z	616(299)	720(219)	26(11.75)
1¼(3.25)	12	3	Z/12S/3Z	784(356)	720(219)	34(15.5)

The breaking strength shall be determined according to the method described in Appendix E.

2.7 Wood Toggle - Wood Toggle shall be manufactured from Teak, Sal, Shisham or Padouk wood and shall conform to the requirements detailed in Figure 1.

2.8 Brass Wire - Brass wire for motor car flag shall be of gauge No.12 SWG.

3. GENERAL REQUIREMENTS

3.1 The National Flag of India shall be made of materials as given in this specification and shall comply with all the terms of this standard.

3.2 The ratio of width to length of the Flag shall ordinarily be 2:3. It and its components shall comply generally with the requirements of Figure 2.

3.3 Flag shall be a tricolour, horizontal, rectangluar panel made up of 3 rectangular panels. The top rectangular panel shall be India Saffron, the middle panel white and the bottom panel India Green.

3.4 A wheel with 24 spokes in Navy blue colour shall be painted, printed, superimposed or embroidered on both sides of the Flag. When superimposed, the cloth used for the purpose shall be identical with the cloth used in the body.

3.5 The design and make up of the Motor Car Flag shall be in accordance with Figure 3. The Flag shall be made from two layers of the fabric and stitched together as indicated in the Figure.

3.6 Cotton duck grey shall be used for the sleeve of the Flag.

3.7 Cotton sewing thread (36s/6) shall be used for stitching cotton bunting and shall match the shade of the panel where the former is used. The number of stitches shall be a minimum of 10 per in. (4 per cm).

3.8 The flax thread or the cotton sewing thread (22s/9) shall be used for sewing in Hemp Cord in the cotton duck sleeve.

3.9 Hemp cordage and wood toggle shall be fixed to the sleeve as shown in Figure 2.

3.10 ....

3.10 The flag shall be in general conformity with the **sealed** sample held in the custody of the **Indian Standards (ISI)** Institution.

(Figures 1, 2 and 3 will be tabled at the meeting. The appendices are not attached).

ANNEXURE VII

(Item 11)

Test Report on Silk Khadi

Sample	Width in inches	Wt per sq yd	Threads per inch		Counts of yarn in deniers		Breaking strength 4" x6-5/8"between grips in lbs*		Weave	Visual Examination.
			Warp	Weft	Warp	Weft	Warp	Weft		
Silk before degumming	(7 determinations) 31.3/31.8 Av.31.5 or 31-4/8	Ozs 1.52	(7 determinations) 100/104 Av.102	(7 determinations) 88/121 Av.103	43.0	60.3	145 135 130 Av.137	235 215 265 Av.238	Plain	Uneven picking was observed throughout the piece. Thick and thin places were also prominent due to crammed picking and also due to weft yarn of different (deniers) counts.
Silk after degumming	(7 determinations) 30.6/31.3 Av. 31.0	Ozs 1.55	(6 determinations) 103/106 Av.104	(11 determinations) 94/117 Av.105	43.0	60.3	115 125 130 Av.123	200 186 Av.190		

Shrinkage after degumming

Warp	Weft
1.7%	1.9%

* Conditioned at 59% - 63% R.H. for 48 hours.

(2)

१२४

ANNEXURE VIII

(Item 12)

Test Report on Wool Khadi

Sample	Special Mark	Width	No. of threads per inch		Counts of yarn (on Hanks of 560 yds basis) Approx.		Weight per sq yd Ozs.	B S 6 5/8"x6 5/8" between grips Lbs.		Weave
			Warp	Weft	Warp	Weft		Warp	Weft	
'A'	Green	31.1/8" 34.7/8" Av. 32.7/8"	28/31 Av.30	27/30 Av.28	2/20^s	2/19^s	5.3/4	125) 130) 130) Av.128	130 130 135 Av.135	Plain
'B'	White	33"/35" Av. 34.1/8"	27/29 Av.28	27/29 Av.28	2/19^s	2/20^s	5.3/4	150 135 120 Av.135	120 135 120 Av.125	Plain
'C'	Saffron	33.5/8" 35.6/8" Av. 34.5/8"	25/29 Av.27	25/29 Av.27	2/21^s	2/17^s	6	140 130 130 Av.135	130 130 135 Av.132	Plain

It would be seen from the report that the test figures reasonably conform with our revised particulars of Bunting except that the average Breaking strength is 125/135 lbs against 220 lbs.

The green and saffron buntings have been dyed with Acid dyes possessing reasonably satisfactory fastness to light. It will however be seen from the dye folders that slight bleeding occurs on the white woollen bunting when the samples are steeped in cold distilled water for 16 hours. It appears this is due to the fact that the dyes have not been completely exhausted during the process of dyeing.

The finish of the cloth is very poor. The dyeing is very uneven and the samples have weft bars althrough. The dyeing defect is due to the variation in the twist and count of yarn. In our opinion the material requires further improvement in the finish and dyeing before it could be considered for use in the manufacture of Flags National India.

128

2.2.2.1 Colours The three colours in the bunting, viz India Green, India Saffron and Navy Blue (of the Chakra) shall correspond when visually examined in ordinary daylight to those of the colours in the sealed sample held in the custody of the ISI (See Clause 3.10).

Note: Spectrophometric values of the colours in the flag presented to the Constituent Assembly (see Foreword) were measured by the Technical Development **Establishment Laboratory** (Stores), Kanpur, using the illuminant C as specified by the International Commission on Illumination and found to be as follows:

Colour	Trichromatic Values			Brightness
	X(Red)	Y(Yellow)	Z(Blue)	Percent
Indian Green	0.288	0.395	0.317	8.9
India Saffron	0.538	0.360	0.102	21.5
Navy Blue	...	...	...	...

It is intended that flags made to this specification should have colours approximating as closely as possible to the colours of the official flag as defined by the above values. For all practical purposes, however, correspondence to the sealed sample shall be considered adequate.

Test Report on Silk Khadi

(see Item 11.2.1)

RH 65% at 72° F.

	Sample No		
	282	283	285
1. Counts of yarn			
Warp	42.43 Denier	39.86 Denier	38.44 Denier
Weft	41.21 "	39.86 "	2/41.97 "
2. No. of Ends per inch	107	107	107
No. of Picks per inch	137	135	96.(d)
3. Wt per Sq.Yd.	1.315 ozs.	1.22 ozs.	1.51 ozs.
4. Breaking Strength. (6-5/8" x 4")			
Warp	127 lbs.	136 lbs.	128 lbs.
Weft	166 lbs.	154 lbs.	249 lbs.

5. General Observations.

1. Picks uneven.
2. Broken & missing ends & picks.
3. Slubs & Snarls.
4. Excessive Knots.

Sr No 46 (224) -13 -

PSA

D.O.No.41/3/49-Public.

NEW DELHI,
the 28th December, 1950.

Dear Shri Verman,

You will perhaps remember that in the last meeting of the T.D.C.-8 we were of the view that, provided the khadi sample arrives in time at the Kanpur Laboratory, a National Flag of the prescribed specifications will be prepared and presented to the President on the 26th January 1951. Our Ministry would very much appreciate if efforts could be made to achieve this object. Would you kindly therefore arrange with Shri Dwarka Nath Lele that the required sample is sent in time to the Kanpur Laboratory for preparing the National Flag? Mr. Krishnamurthy, you will remember, said that they would take about five to six days to prepare the sample. I am sending a copy of this to Mr. Krishnamurthy also so that he may get in touch with you and see that this could be achieved.

Yours sincerely,

avr

(A.V. Raman)
UNDER SECRETARY.

ISSUED
On 28/12
Initial
R. & I. A.

Shri Lal. C. Verman,
Director,
Indian Standards Institution,
19, University Road,
DELHI.

J NI 47 (225) 132

D. 7522/50 – Public
30-XII-50

DELHI TELEPHONE 41/309
MILITARY TRUNK - 233

No. 02501/137/TDC8/MG/TD-8
ARMY HEADQUARTERS
Master General of the Ordnance Branch
DHQPO NEW DELHI-11
Dated 29 Dec 50

To

The Chief Supdt. Development, Textiles & Clothing,
Post Box No.294,
KANPUR.

Subject :- NATIONAL FLAG OF INDIA.

It has been proposed to present a sample of the National Flag of India made from hand-spun and hand-woven cotton khadi to the President on 26 January 51.

The grey cotton khadi is being procured by the I.S.I. and it will be forwarded to you so as to reach you by 15 Jan 51 for processing and preparation of a flag in one of the approved sizes. In the meantime you may please collect the necessary dyestuffs if not already available with you.

Since the Flag is to be presented to the President on an important occasion utmost care should be taken in its preparation. The shades should strictly conform to the approved ones.

A sample cutting illustrating India Saffron and India Green is forwarded herewith for your guidance. This should be returned to this office along with the flag.

The flag should reach this office by 22 Jan 51.

M.Krishnamurthi

for Director of Technical Development.
(M. Krishnamurthi).

Copy to:-

53868

US 56 m
30/12

1. The Director
Indian Standards Institution,
19 University Road, Civil Lines, DELHI 8.

Please ensure that the grey cotton khadi/material reaches TDST&C,Kanpur by 15 Jan 51, as otherwise it may not be possible to get the flag made in time (Khadi Duck Cotton for the Sleeve should also be forwarded).

2. Ministry of Home Affairs.✓
(For information of Shri A.V. Raman)

M.

Sr No 48 (226) 133

DELHI TELEPHONE 41/309
MILITARY TRUNK - 233

No. 2501/137/TDC8/MG/TD-8
ARMY HEADQUARTERS
Master General of the Ordnance Branch
DHQPO NEW DELHI-11
Dated 30 Dec 50
2-1-51

To

The Director,
Indian Standards Institution,
19 University Road, Civil Lines,
DELHI 8.

Dear Sir,

Subject :- NATIONAL FLAG OF INDIA.

Reference in continuation of this office letter no. even dated 27 Dec 50.

The draft specification forwarded by you, in its present form includes all features common for the three flags (Cotton, Woollen and Silk) and the particulars of the Cotton Khadi only. When you draw up specifications for the National Flag from woollen and silk materials all the common features will again have to be reproduced therein. To avoid this it is suggested that the draft specification under reference be split up into two specifications, one for "The National Flag of India (in which only the Common features of all the three material flags will be embodied) and the other for the Cotton Khadi(white and dyed).

A draft specification for the National Flag on the lines suggested above is enclosed for your perusal. Another draft for the Cotton Khadi is also being drafted and will be sent to you on 2 Jan 51.

2. When the particulars for the silk and woollen materials are finalised two more separate specifications can be drawn up on the lines of the specification for the Cotton Khadi, i.e. there will be one specification for the National Flag of India, embodying all the features common to the Flags made from any of the three materials and three more separate specifications for the three materials. This proposal has been discussed by the under-signed with Shri A.V. Raman (Rep. Ministry of Home Affairs on the Sectional Committee for the National Flag India) who is in general agreement.

3. It is further suggested that in the specification for the National Flag it is not necessary to refer to the composition of the Sectional Committee and the circumstances which have led to the drawing up of the specification. The subject matter of pages 1 and 2 (and part of page 3) of the draft specification forwarded by you may therefore be deleted. These details are nodoubt known to all concerned and will be available in the records of the ISI.

4. The layout of the draft specification forwarded herewith is on the lines followed in our Defence specifications and may be considered for adoption by ISI.

5. As regards the draft specification forwarded by you the following further remarks may also please be noted.

Page 4 Table II	This need not appear in the body of the specification. The table of dimensions as at present given in our drawing No. may be reproduced at the end of the spec. as suggested in the enclosed draft.
Page 5 Table III	- do -

Contd.....2.

Clause 5.3 - From our experience triangular reinforcements are essential for Motor car flag also.

Clause 8.1 - Should be deleted. (This is superfluous).

Appendix A } If our suggestion to have separate spec. for the three materials be agreed to, these
Appendix B } appendices will have to be deleted from the spec. for "The National Flag of India" and included in the material spec.

Procedure for determining breaking strength of Duck Cotton may also be included as an appendix and it is suggested that the test strip be 4" wide. A 2" wide strip will register a low B.S. and % error will be high.

The draft spec. for the National Flag of India sent herewith has been drawn up rather hastily. You may please therefore scrutinise it carefully and make the necessary amendments. The amended draft may be circulated to the members if considered necessary.

/152 A

M. Krishnamurthi

for Director of Technical Development.
(M. Krishnamurthi).

D. 22/51—Public
2—1—51

IN
P.G.H.(O)
2 JAN

OUT
JAN 2
MGO REGY

P.S.A.
2/1

Copy to:-
Shri A.V. Raman.
Under-Secretary Ministry of Home Affairs) ✓

2 JAN.
OUT

av 3/1/51
Public

M.

Sr No 49 -135- 228

ISI

INDIAN STANDARDS INSTITUTION

Grams : Indstand
Delhi
Phones : 6105
~~5419~~
~~Block 11~~
~~Old Secretariat~~
Delhi 8 ~~2~~, India

Your Ref :

Our Ref : TDC 8/2A

19 University Road
3 January 1951

Subject : National Flag of India.

A.V. Raman Esq.,
Ministry of Home Affairs,
New Delhi.

Dear Sir,

pp 139-140 [illegible]

Further to this office endorsement of even number dated 29 December 1950, I would inform you that Shri Dwarka Nath Lele has despatched a sample of cotton khadi bunting, 12 yards in length, to the Kanpur Laboratory of the Defence Ministry on 1 January 1951.

2. I trust Mr. Krishnamurthi will do the needful to have three or more National Flag of India prepared early according to the prescribed specifications for presentation to the President of India on 26 January 1951 and for reference standard to be kept in the custody of the ISI.

3. I am endorsing a copy of this letter to Mr. Krishnamurthi so that he may contact the Kanpur Laboratory and get the work done as expeditiously as possible.

4. We are having a little delay in finalizing the standard, but hope we shall soon overcome the difficulties.

Yours faithfully,

Lal C Verman

(Lal C. Verman)
Director.

Please issue the two drafts
below and then submit
the letters to D S (F) with file
for sig.
A V Raman
5.1.51

Copy to:

1) M. Krishnamurthi Esq.,
Directorate of Technical Development,
AHQ, MGO Branch,
DHQ PO, New Delhi.

Public

2) Dwarka Nath Lele Esq.,
C/o All India Spinners Association,
P.O. Sevagram Via Wardha,
with reference to his letter No. 1101 dated 1 January 1951.

BD.

Sr No. 50

D.O.No.41/3/49-Public.

NEW DELHI,
the 5th January, 1951.

Dear Sir,

Many thanks to your letter No.TDC 8/2A of the 3rd January 1951. We appreciate your promptness. I have also written to Mr. Krishnamurthy requesting him to expedite the matter. Is there going to be any presentation ceremony in this regard?

x p.136 corr
✓ p.36 N.65

Yours sincerely,

(A.V.Raman)
UNDER SECRETARY.

ISSUED
On 5/1

Shri Lal C. Verman,
Director,
Indian Standards Institution,
19, University Road,
DELHI-8.

Mr PS A
8/1/51

Sr. No. 51

(230)

137

DELHI TELEPHONE 41/1077
MILITARY TRUNK - 452

No. 2501/137/TDC8/MG/TD-8
ARMY HEADQUARTERS
Master General of the Ordnance Branch
DHQPO NEW DELHI-11 5 Jan 51

To

The Chief Supdt. Development, Textiles & Clothing,
Post Box No.294,
KANPUR.

D. 127/51 — Public
8—1—51

OUT 5 JAN MGO HQRS OUT

Subject :-. NATIONAL FLAG OF INDIA.

p135 corr

Reference I.S.I. letter No. TDC.8/2A dated 3 Jan 51.

If the cotton khadi has already been received by you please go ahead with processing and fabrication of the flags expeditiously.

Atleast one flag should be forwarded to this office at the earliest.

IN 6 JAN IN

S Nilakantam

Lt.Colonel.
for Director of Technical Development.
(S.V. Nilakantam).

Mr 3 A

Copy to:-
The Indian Standards Institution,
19 University Road, Civil Lines, DELHI 8.

OUT 8 JAN 51

or Ministry of Home Affairs (For the attention of Shri A.V.Raman)

M.

6/1

Sr. No 52

(231)

-138-

DELHI TELEPHONE 41/309
MILITARY TRUNK - 452

No.02501/137/TDC8/MG/TD8
ARMY HEADQUARTERS
Master General of the Ordnance Branch
DHQPO NEW DELHI-11

11 Jan 51

To

The Chief Supdt. Development, Textiles & Clothing,
Post Box No.294,
KANPUR.

C.D. 298/51-Public
13-1-51

OUT
12 JAN
MGO REGY
OUT

Subject :- NATIONAL FLAG OF INDIA.

Reference your telegram of 9 Jan 51. Ack recd.

A sample cutting illustrating the correct Navy Blue Shade (obtained from NHQ) is forwarded herewith for guidance.

As regards the figures referred to in ISI draft specification, ISI have been requested to forward to you the same immediately.

for Director of Technical Development.
(M. Kirishnamurthi).

Copy to:-

The Asstt. Director,
Indian Standards Institution,
19, University Road, Civil Lines,
DELHI 8. (For the attention of Mr. Maharaj Kishan)

Ref. telephonic conversation yesterday.

It is presumed you have forwarded to C.S.D.T. & C Kanpur the figures (drawings) 1,2 and 3 referred to in your draft specification. If not done already please give your priority attention to this as otherwise the fabrication of the flag will be held up.

~~Ministry of Home Affairs.~~ ✓

For information of Shri A.V. Raman.

13/1

Public

M. 8A/[?]

INDIAN STANDARDS INSTITUTION

Member, International Organization for Standardization (ISO)

Grams : Indstand
Delhi

Phones : 6105
5419

19 University Road
Civil Lines
Delhi 8, India

Your Ref :

Our Ref : TDC 8/2A

29 December 1950.

Subject : NATIONAL FLAG OF INDIA

Shri Dwarka Nath Lele,
C/o All India Spinners Association,
P.O. Sevagram,
Via Wardha.

Dear Sir,

You will recall that the Sectional Committee for the National Flag of India (TDC 8), decided in its last meeting held on 22 December 1950, that a National Flag of the prescribed specifications would be prepared and presented to the President of India on 26 January 1951, if matters can be suitably arranged.

2. I shall, therefore, be obliged if you will kindly prepare a sample of cotton khadi bunting, 12 yards in length, according to the specifications of yarn and bunting detailed below and send the same direct to the Kanpur address given to you by Shri M.Krishnamurthi:

I - SPECIFICATION FOR YARN FOR COTTON KHADI BUNTING

Characteristics	Value	Tolerance
1. Count		
Single	20s	± 10%
Folded	20s/2	± 10%
2. Twist		
Single	18 turns per in.	± 1 turn per in.
Folded	11 turns per in.	± 1 turn per in.

II.....

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~~140~~

II - CONSTRUCTION DETAILS OF COTTON KHADI BUNTING IN BLEACHED AND DYED STATE

Characteristics	Value	Tolerance
1. Threads per inch		
Warp	44	± 4
Weft	42	± 4
2. Weight oz per sq yd	6.0	± 0.5
3. Breaking Load (for 2 in. x 8 in. test piece), minimum, lb		
Warp	90	0
Weft	85	-0
4. Shrinkage, maximum, percent	2	+ 0

3. Your co-operation in this matter will be greatly appreciated by all concerned and we depend on you for meeting this engagement. I shall be glad if you will kindly inform me the probable date by which you will be in a position to despatch the bunting to Kanpur.

Yours faithfully,

Lal C Verman

(Lal C. Verman)
Director.

D.S(F) may see for info. this is in response to my request

A V Raman
30/12/50

D. 17/51 — Public
2—1—51

Copy to:

D.S(F)

Public

30.XII.50

1) Shri A.V. Raman,
Ministry of Home Affairs,
New Delhi.

2) Shri M. Krishnamurthi,
Directorate of Technical Development,
Army Headquarters,
MGO Branch, DHQPO,
NEW DELHI.

86

M/

Sr. No. 53

Grams: Indstand
Delhi.

Phone: 5921/4

INDIAN STANDARDS INSTITUTION(ISI)

D.4224/51—Auth
19-1-51

19 University Road,
Civil Lines,
Delhi 8, 18 January 1951.

Our Ref: TDC 8/2A

Subject: National Flag of India Sectional Committee (TDC 8)

Chairman and all members of TDC 8.

Dear Sir,

Proceedings of the Fifth Meeting of
TDC 8 held on 22 December 1950

Remarks invited by 3 February 1951

-- I am attaching herewith a copy of the above proceedings duly approved by the Chairman of **TDC 8**.

2. If you find that there are any discrepancies in the proceedings as recorded kindly let me know before the date stated above. If **no** reply is received from you by the said date, I shall presume that you find the proceedings to be **in** order.

Yours faithfully,

Maharaj Kishen

(Maharaj Kishen)
Assistant Director(Textiles).

Please draft a reply saying that we have no comment & put up with file.
19/1/51

Encl: 1

K.

Public

PSD
19/1

Mr. A.V. Raman

INDIAN STANDARDS INSTITUTION (ISI)

PROCEEDINGS
of the
FIFTH MEETING
of the
SECTIONAL COMMITTEE FOR THE NATIONAL FLAG OF INDIA (TDC 8)
held at
10.30 A.M. ON FRIDAY 22 DECEMBER 1950 IN ROOM NO. 8A,
SOUTH BLOCK, CENTRAL SECRETARIAT, NEW DELHI

PRESENT

Chairman:	Mr. Bharat Ram
Members :	Dr. G.M. Nabar
	Mr. M. Krishnamurthi
	Mr. Randhir Singh
	Mr. A.V. Raman
	Mr. Dwarka Nath Lele
By Invitation:	Dr. N.L. Narayan
	Mr. Kapil D.O. Pandey
Staff:	Dr. Lal C. Verman, Director, ISI
	Mr. Maharaj Kishen, Assistant Director (Textiles), ISI
	Mr. T. Balakrishnan, Technical Assistant, ISI
Apologies for Absence:	Mr. Sushil Sarkar
	Mr. P. Hariharan

Item 0 GENERAL

0.1 In his opening remarks, the Chairman stressed the desirability of finalizing the specification at as early a date as possible.

Item 1 CONFIRMATION OF THE PROCEEDINGS OF THE FOURTH MEETING

1.1 Proceedings of the fourth meeting, held on 30 January 1950, having been previously circulated were taken as read and CONFIRMED.

Item 2 COMPOSITION

2.1 Having considered the composition of TDC 8 as given in Annexure I to the Agenda of the meeting and the names as given in 2.2 of the Agenda, it was DECIDED to co-opt the following gentlemen as members of TDC 8:

i) Dr. N.L. Narayan, representing the Government of Rajasthan;

ii) Mr. Vichitra Narain Sharma, representing Shree Gandhi Ashram, Meerut.

3.......

Item 3. SPECIFICATION FOR NATIONAL FLAG

3.1 Having taken into account the possibility of delay in finalising the specifications for the National Flag of India made of Silk Khadi and Wool Khadi, it was DECIDED to formulate separate specifications for the National Flag of India made of (a) Cotton khadi, (b) Silk khadi, and (c) Wool khadi and finalise each as early as possible.

Item 4. COTTON KHADI

4.1 The flags manufactured out of the approved cotton khadi were tabled and it was DECIDED to examine them later along with test reports as listed under Item 10 of the Agenda.

Item 5. MATERIAL FOR SLEEVE

5.1 Having considered the test report on the material as given in Annexure II to the Agenda, it was DECIDED to stipulate the following (i) specifications for yarn and (ii) construction details of Cotton Duck, Grey:

(i) SPECIFICATIONS FOR YARN FOR COTTON DUCK

Characteristic	Value	Tolerance
1. Count		
Single	16s	± 10%
Folded	16s/3	± 10%
2. Twist		
Single	16 turns per in.	± 1 turn per in.
Folded	8 turns per in.	± 1 turn per in.

(ii) CONSTRUCTION DETAILS OF COTTON DUCK GREY

Characteristic	Value	Tolerance
1. Threads per in.		
Warp	40	± 1
Weft	34	± 3
2. Weight, oz per sq yd	10.5	± 1
3. Breaking Load, (for 2 in. x 8 in. test piece, minimum, lb)		
Warp	105	- 0
Weft	90	- 0

Item 6.......

Item 6 COVER FOR SLEEVE

6.1 Having considered the observation of Mr. Krishnamurthi in regard to matter of cover for sleeves of flags as given in 6.1.1 of the Agenda, it was DECIDED that the standard specification for the National Flag of India (Annexure VI to Agenda) should not provide for covering up the sleeve of the flag with bunting.

Item 7 SIZE OF FLAGS

7.1 Having reconsidered the matter of sizes of flags and the proportion of their width to their length, it was DECIDED that the standard specification should (I) cover only five standard sizes as given in the drawing, tabled in the meeting, and (II) stipulate that ordinarily the ratio of the width of the flags to their length shall be 2:3.

Item 8 WATER REPELLENCY

8.1 Having considered (a) the observations of Mr. Krishnamurthi on water repellency treatment of flags as contained in 8.1.1 of the Agenda and (b) the suggestion of Dr. Nabar that the matter be further investigated as regards the probable effect of water repellent compounds usually used, on (i) the brilliancy of the colour in the flags (ii) durability of the bunting, it was DECIDED that (1) the standards should not for the present include any provision for treating the bunting with water repellent compounds (2) that Dr. Nabar be, and was forthwith, requested to investigate the matter for future use and to report his findings to the Committee through the ISI Directorate (This Dr. Nabar agreed to do).

Item 9 OPTICAL ILLUSION

9.1 Having discussed the matter of optical illusion from the aspect stated in 9.1 of the Agenda it was DECIDED to specify in the standard specification (Annexure VI to the Agenda) equal widths of the three panels of the flag due to the reason that among other things colours of the panels were deemed to be connected with the religious sentiments of the major communities of India.

Item 10 TEST REPORTS

10.1 Having considered and discussed (a) test reports on the constructional details of cotton khadi as given in Annexure III to the Agenda for the meeting, (b) Spectrophotometric values of colours on cotton khadi, as given in Annexure IV to the Agenda, (c) Trial report (under actual flying conditions) on the National Flag of India (Cotton khadi) as given in Annexure V to the Agenda, and (d) the report on spectrophotometric values of colours of the National Flag of India presented by the Hon'ble Prime Minister to the Constituent Assembly in 1947, reading:

	"Trichromatic values			Brightness	Dominant Wave length millimicro
	X(R)	Y(y)	Z(B)	%	
Saffron	0.538	0.360	0.102	21.5	599 W
White	0.313	0.319	0.368	72.6	-
Green	0.288	0.395	0.317	8.9	533

Illuminant C."

it was.......

it was DECIDED to (1) specify the following specifications for yarn, and (2) construction details of cotton khadi bunting in bleached and in dyed state:

(i) SPECIFICATIONS FOR YARN FOR COTTON KHADI BUNTING

Characteristic	Value	Tolerance
1. Count		
Single	20s	± 10%
Folded	20s/2	± 10%
2. Twist		
Single	18 turns per in.	± 1 turn per in.
Folded	11 turns per in.	± 1 turn per in.

(ii) CONSTRUCTION DETAILS OF COTTON KHADI BUNTING IN BLEACHED AND IN DYED STATE

Characteristic	Value	Tolerance
1. Threads per inch		
Warp	44	± 1
Weft	42	± 4
2. Weight, oz per sq yd	6.0	- 0.5
3. Breaking Load (for 2 in. x 8 in. test piece), minimum, lb		
Warp	90	- 0
Weft	85	- 0
4. Shrinkage, maximum, percent	2	+ 0

(II) include a provision in the standard specification regarding 'colours' similar to the one contained in clause 2.2.2.1 of the draft specification (Annexure VI to Agenda) tabled at the meeting,

(III) assign the ISI Directorate the work of collection of spectrophotometric values of the Navy blue colour for the Chakra used in the flag presented to the Constituent Assembly in 1947, through Mr. Krishnamurthi, and

(IV).........

(IV) authorize the ISI Directorate to fill it in clause 2.2.2.1 of the specification (Annexure VI to Agenda) and

(V) allot to the ISI Directorate the work of supplying to the public samples of dyed buntings.

10.2 After thorough and detailed discussion of the draft specification of the National Flag of India made of cotton khadi as given in Annexure VI to the Agenda for the meeting, it was DECIDED to authorise the Director of the ISI to re-edit the draft taking care especially to amend it in the following and consequential respects:

a) To make all alterations consequential upon the decisions taken as stated in items 5.1, 7.1 and 10.1 of the proceedings;

b) To omit out of Table I of the draft specification (Annexure VI to Agenda) (1) the columns titled "Twist Multiplier for single yarn" and "Twist Multiplier for double yarn" and in consequence thereof the provision regarding the tolerance in the twist multipliers, and (2) to limit the tolerance in turns per inch of both single and folded yarn to ± 1 calculating the turns on the basis of twist multiplier as stated in the Table, (3) to alter the breaking strength values of cotton khadi to the values as specified in the Table given in 10.1 to estimated values likely to be obtained on 2" x 8" strips;

c) To change the explanatory note under Table II of the draft specification (Annexure VI to Agenda) so that it provides that the width of the bunting shall be subject to agreement between the vendor and the purchaser;

d) To omit clause 2.2.3(B) out of the specification (Annexure VI to Agenda);

e) To stipulate in clause 2.3 of the specification (Annexure VI to Agenda) that cotton duck grey shall be made of unsized warp;

f) To change the explanatory note under Table IV of the draft (Annexure VI to Agenda) so that it provides that the width of the Cotton Duck, grey shall be subject to agreement between the vendor and the purchaser;

g) To omit first sentence of clause 2.4 (Annexure VI to Agenda);

h) To omit out of Table V (Annexure VI to Agenda) the column "Length of finished thread per lb";

j) To omit the columns 'Length' and 'Weight' out of Table VI (Annexure VI to Agenda).

10.3 Having considered clause 28(e) of the Rules and Regulations of the ISI, and in the context of the desirability of the early finalization of at least one specification of the National Flag of India, it was DECIDED that the Director of the ISI be and was forthwith authorised to assume the consent of the Sectional Committee to all decisions that he

might.......

might make in connection with procedural matters such as dispensing with the circulation of the draft for the usual period of three months, making recommendation to the Textile Division Council (TDC) and other ISI authorities in this or similar respects.

10.4 The committee also DECIDED that

(i) the draft Indian Standard Specification for the National Flag of India (Cotton khadi) should be finalised and published, if possible, before 26 January 1951;

(ii) a National Flag of India should be prepared according to the prescribed specification and presented to the President of India on 26 January 1951, if matters could be suitably arranged.

This [illegible] would not materialise now [illegible] 19/1

Item 11 SILK KHADI

11.1 After having considered (a) Annexure VII to the Agenda for the meeting and (b) test report received from Mr. Krishnamurthi on the three samples mentioned in 11.2.1 of the Agenda, it was DECIDED (1) to request Mr. Lele to provide additional three yard sample of silk similar to the samples marked 282 and 283 but prepared of un-degummed silk, and (2) (i) to have these samples tested and made into flags and (ii) to have these flags tested under actual flying conditions.

Item 12 WOOL KHADI

12.1 Test report as given in Annexure VIII to the Agenda was considered. It was DECIDED (i) to request Dr. Narayan to send samples of woollen buntings similar to sample No. ISI-19 made of Chokla variety of wool;

(ii) to request Dr. Nabar to dye the sample to be received from Dr. Narayan;

(iii) to request Mr. Krishnamurthi (a) to have the dyed sample tested at his Kanpur Laboratory and made into flags (b) to have the flags tested under actual flying conditions;

(iv) to request Mr. Krishnamurthi to supply data as regards limits and tests for fastness to light and fastness to wash, for incorporation in the draft specification for National Flag of India manufactured from Woollen Khadi.

There being no other business, the meeting terminated with a vote of thanks to the chair.

OP

Sr-No-54 o/c (241)

148

No:41/3/49-Public.
Government of India.
Ministry of Home Affairs.

To

The Assistant Director (Textiles),
Indian Standards Institution,
19, University Road,
Civil Lines,
Delhi-8.

NEW DELHI-2, the 27th January, 1951.

Subject:-Proceedings of the Fifth Meeting of TDC 8 held on the 22nd December 1950.

Dear Sir,

Please refer to your letter No.TDC 8/2A, dated the 18th January, 1951. I have no comments to offer on the proceedings, of the Fifth Meeting of TDC 8 held on 22nd December 1950, enclosed therewith.

H.141-7 Cur

Yours faithfully,

Sd/- (A.V. RAMAN)
Under Secretary to the Government of India.

-BLJ-
25.1.51.

Sr. No. 55 PSK

149

(242)

Grams: INDSTAND
DELHI

Phone: 5921/1

INDIAN STANDARDS INSTITUTION (ISI)

19, University Road,
Civil Lines,
Delhi 8, 20 January 1951

Our Ref: TDC 8/1T

Subject: NATIONAL FLAG OF INDIA

D.474/51-public
23/1/51

Filed here on 24/1/51
Public

All Members of National Flag
Sectional Committee (TDC 8),
Textile Division Council (TDC),
Executive Committee (EC) and
General Council (GC).

Dear Sir,

The National Flag Sectional Committee (TDC 8), at its fifth meeting held on 22 December 1950, considered the draft Indian Standard Specification for the National Flag of India (Cotton Khadi) and decided as under:

i) To formulate separate specifications for the National Flag of India made of cotton khadi, wool khadi and silk khadi;

ii) To authorise the ISI Directorate to finalise the specification for the Flag made of cotton khadi in accordance with the directives of TDC 8;

iii) In view of the desirability of early finalization of at least one specification of the National Flag of India and in view of its non-controversial nature, to recommend to the TDC to dispense with the circulation of the draft for the usual period of three months, under Rule 28(e) of the Rules and Regulations of the ISI;

iv) To finalise and publish the specification for the National Flag of India (Cotton Khadi), if possible, before 26 January 1951.

2. Because of the necessity for consulting certain members of the TDC 8 in respect of technical and other details, it is regretted that the finalization of the draft has been so much delayed that it cannot now be issued before 26 January 1951. It is also necessary before publishing the standard to obtain approval of the committees and councils to whom this letter is now being issued.

ff 150-168 cor -- 3. I am pleased to enclose a copy of the finalised draft Indian Standard Specification for the National Flag of India (Cotton Khadi) for your approval, as required under Rule 28(g).

4. The members of the TDC are in addition requested kindly to let me have their approval to the recommendations of TDC 8 at (iii) under Para 1 above.

5. I shall be glad if you will kindly let me have your approval to the enclosed specification, or your comments thereon, as early as possible and in any case before 5 February 1951. If no reply is received from you by that date I shall presume that you approve the draft and if you are a TDC member, you also agree to recommendation (iii) of Para 1.

Yours faithfully,
Lal C Verman
(Lal C. Verman)
Director.

Encl: 1.

IS:1-1951

INDIAN STANDARD
SPECIFICATION FOR
THE NATIONAL FLAG OF INDIA
(COTTON KHADI)

National Flag Sectional Committee, TDC 8

Chairman	
MR. BHARAT RAM	Delhi Cloth and General Mills Co.Ltd., Delhi
Members	
MR. M.KRISHNAMURTHI	Ministry of Defence, New Delhi
MR. DWARKA NATH LELE	All India Spinners' Association, Wardha
MR. G.E. LONGDIN	New Egerton Woollen Mills, Dhariwal
DR. G.M. NABAR	Council of Scientific and Industrial Research, New Delhi
DR. N.L.NARAYAN	Government of Rajasthan, Jaipur
MR. A.V. RAMAN	Ministry of Home Affairs, New Delhi
MR. RANDHIR SINGH	Directorate General of Industries and Supplies (Ministry of Industry and Supply), New Delhi
MR. VICHITRA NARAIN SHARMA	Shri Gandhi Ashram, Meerut
DR. LAL C. VERMAN	Director, ISI
Staff	
THE LATE MR.C.P. HALKATTI	Formerly Assistant Director (Textiles), ISI
MR. MAHARAJ KISHEN	Assistant Director (Textiles), ISI
MR. T.BALAKRISHNAN	Technical Assistant, ISI

FOREWORD

The Honourable Shri Jawaharlal Nehru presented to the Constituent Assembly of India on 22 July 1947, two flags, one of silk and the other of cotton khadi, specially designed and manufactured for adoption as the National Flag of India. He moved the following Resolution:

> "Resolved that the National Flag of India shall be a horizontal tricolour of deep saffron (Kesari), white and dark green in equal proportion. In the centre of the white band, there shall be a wheel in Navy Blue to represent the Charkha. The design of the Wheel shall be that of the Wheel (Chakra) which appears on the abacus of the Sarnath Lion Capital of Asoka. The diameter of the Wheel shall approximate to the width of the white band. The ratio of the width to the length of the Flag shall ordinarily be 2:3."

The motion was adopted, the whole Assembly standing.

This.....

This Resolution did not purport to furnish full details regarding the quality of the cloth, and other particulars required for the manufacture of flags. Hence the necessity arose for the preparation of self-contained specifications for the National Flag of India.

The Army Headquarters, who had issued a working drawing for the National Flag for the use of the Army, suggested to the Indian Standards Institution to issue a standard for the National Flag on the basis of their requirements.

The Government of India in the meanwhile expressed a desire that the cloth used for the manufacture of the Flag for use by Government should be hand-spun and hand-woven khadi. Accordingly it was decided to formulate standards of the National Flag involving the use of hand-spun and hand-woven cotton, woollen and silk fabrics.

This standard deals only with the National Flag made of cotton khadi. Standards for National Flags made of wool and silk are being dealt with separately.

Use of this standard requires reference to the following Indian Standards:

IS:9 - 1949	Method of Test for Determining Shrinkage in Woven Cotton and Linen Cloth on Washing,
IS:237-1951	Method for the Determination of Cotton Yarn Count (or Yarn Melidity in gk),
IS:238-1951	Method for the Determination of Twist in Cotton Yarn ,
IS:240-1951	Method for the Determination of Ends and Picks in Woven Cotton Fabrics,
IS:241-1951	Method for the Determination of Cotton Fabric Dimensions,
IS:242-1951	Method for the Determination of Weight per Unit Area or Unit Length of Cotton Fabrics,
IS:243-1951	Method for the Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabric (by Constant Rate of Traverse Method).

All of these standards are in advanced stage of preparation and expected soon to be published except the IS:9-1949 which is already available.

In the preparation of this standard considerable assistance has been received from the All India Spinners' Association, Government of Rajasthan, the Directorate of Technical Development (Ministry of Defence), Department of Chemical Technology (University of Bombay), and others.

1. SCOPE

1.1 This standard prescribes the design and construction of the National Flag of India (Cotton Khadi) made of hand-spun and hand-woven cotton khadi material. It also covers the specifications of the materials to be used in the manufacture of the Flag.

2.....

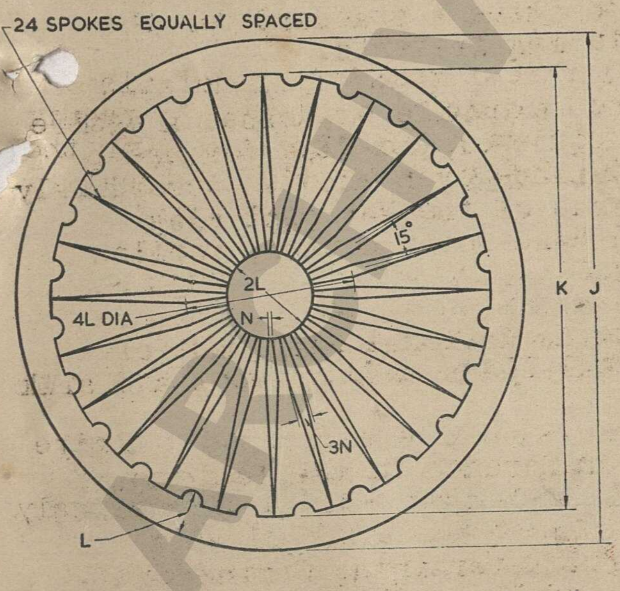
24 SPOKES EQUALLY SPACED
15°
2L
K
J
4L DIA
N
3N
L

Fig 1 Ashoka Chakra

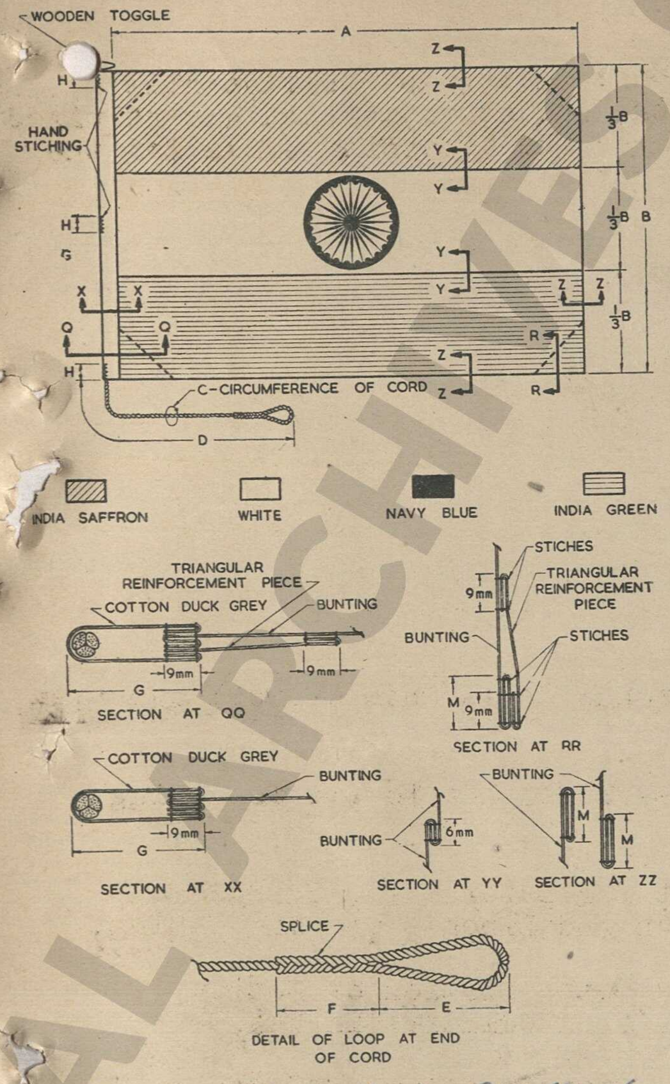
WOODEN TOGGLE
A
H
HAND STICHING
H
G
X X
Q Q
H
Z Z
Y Y
Y Y
Z Z
R R
Z Z
$\frac{1}{3}$B
$\frac{1}{3}$B
$\frac{1}{3}$B
B
C-CIRCUMFERENCE OF CORD
D
INDIA SAFFRON
WHITE
NAVY BLUE
INDIA GREEN
TRIANGULAR REINFORCEMENT PIECE
COTTON DUCK GREY
BUNTING
9mm
9mm
G
SECTION AT QQ
STICHES
TRIANGULAR REINFORCEMENT PIECE
9mm
BUNTING
STICHES
M
9mm
SECTION AT RR
COTTON DUCK GREY
BUNTING
9mm
G
SECTION AT XX
BUNTING
6mm
SECTION AT YY
BUNTING
M
M
SECTION AT ZZ
SPLICE
F
E
DETAIL OF LOOP AT END OF CORD

Fig 2 Constructional details of National Flag

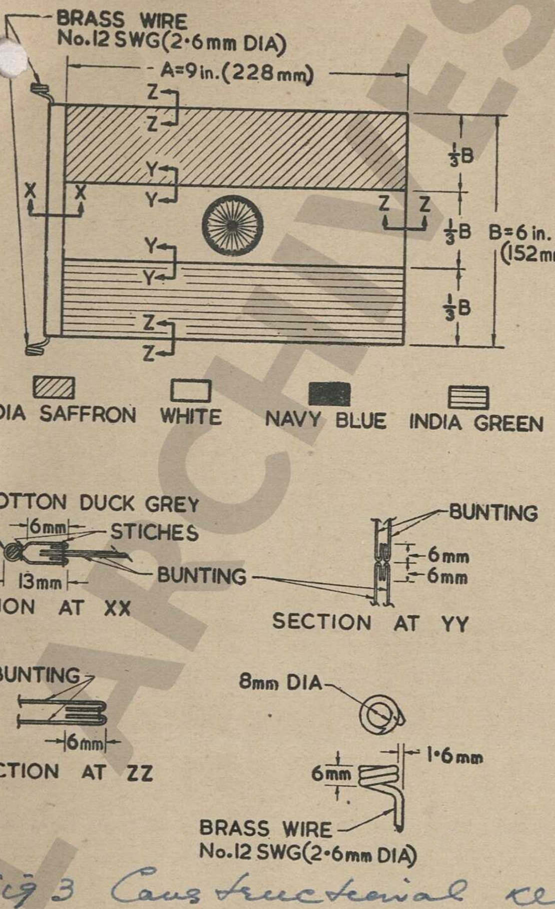
BRASS WIRE
No.12 SWG (2·6 mm DIA)
A=9 in. (228 mm)
Z
Z
Y
Y
X
X
Z
Z
Y
Y
Z
Z
$\frac{1}{3}$B
$\frac{1}{3}$B
$\frac{1}{3}$B
B=6 in. (152 mm)
▨ INDIA SAFFRON
☐ WHITE
■ NAVY BLUE
▤ INDIA GREEN
COTTON DUCK GREY
6mm
STICHES
BUNTING
G
13mm
SECTION AT XX
BUNTING
6mm
6mm
SECTION AT YY
BUNTING
6mm
SECTION AT ZZ
8mm DIA
1·6mm
6mm
BRASS WIRE
No.12 SWG (2·6mm DIA)

Fig 3 Constructional details of National Flag for Motor Car

2. CONFORMITY TO SEALED STANDARD FLAG

2.1 All flags made to this standard besides satisfying the requirements of this standard shall be in general conformity with the sealed standard National Flag of India (Cotton Khadi) held in the custody of the Indian Standards Institution.

3. GENERAL DESIGN

3.1 The Flag shall be a tricolour rectangular panel, made up of three rectangular panels or sub-panels of equal width. The colour of the top panel shall be India Saffron (Kesari) and of the bottom panel India Green. The middle panel shall be white, bearing in the centre, the design of the Asoka Chakra in Navy Blue colour conforming in dimensions to Fig 1 and Table I:

TABLE I DIMENSIONS OF ASOKA CHAKRA FOR DIFFERENT SIZES OF FLAGS

(See Fig 1 and clause 3.1)

All dimensions in millimeters

Flag Size No.	J	K	L	N
1	1400	1240	110	11
2	790	700	62	6
3	390	345	30	3
4	190	165	16	1.5
5	40	35	3.5	0.4

3.2 The chakra shall preferably be screen-printed on both sides of the Flag, or otherwise printed or stencilled, or suitably embroidered, on both sides in all cases.

3.3 The standard ratio of the height (or width) to the length of the flag shall be two to three (2:3).

4. STANDARD SIZES

4.1 There shall be five standard sizes of the flag, **four as specified** in Fig 2 and Table II, and the fifth and the **smallest size**, designated No.5 as specified in Fig 3, for use on motor cars.

4.2 Flags of other sizes and having height to length ratio different from 2 to 3, if required to be made for special purposes, shall in all other respects be in conformity with this standard.

5. CONSTRUCTION

5.1 All National Flags of India (Cotton Khadi) shall be made from cotton khadi bunting specified in clause 6. The panels shall be stitched with the cotton sewing thread, fine specified in clause 8, of the colour matching the shade of the panel against which it appears in the finished flag. The stitching shall be in accordance with the details shown in Fig 2 and 3 and the number of stitches per inch shall be at least 10 per inch (or 4 per cm).

5.2 All flags shall have a cotton duck sleeve of the size and construction shown in Fig 2 and 3 and Table II, and made of the material specified in clause 7.

Table II.....

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TABLE II DIMENSIONS OF DIFFERENT SIZES OF FLAGS
(See Fig 2 and clause 4.1)

Flag Size No.	Overall Flag Dimensions				Hem		Sleeve				Hemp Cord and Loop							
	A		B		M		G		H		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1	21' 252	6400	14' 168	4270	1	25	2½	64	1⅝	41	1¼	32	84	2140	3	76	2½	64
2	12' 144	3660	8' 96	2440	½	13	2	51	1⅝	41	1	25	48	1220	3	76	2½	64
3	6' 72	1830	4' 48	1220	½	13	1½	38	1⅝	41	¾	19	24	610	3	76	2½	64
4	3' 36	915	2 24	610	½	13	1¼	32	1¼	32	¾	19	12	305	2½	64	2	51
5*	9 "	228	6 "	152	-	-	½	13	-	-	-	-	-	-	-	-	-	-

* See Fig 3

5.3 The four corners of all flags, except the motor car flags, shall be reinforced in the manner indicated in Fig 2, by triangular pieces of bunting of the same colour as the panels on which they appear.

5.4 A length of hemp cord shall be hand-stitched inside the sleeve and shall be of the size and style as specified in Fig 2 and Table II. The cordage shall comply with the requirements of clause 9.

5.5 The flax or cotton sewing thread, coarse, specified in clause 8 shall be used in sewing the hemp cord inside the sleeve in the manner indicated in Fig 2 and Table II.

5.6 A wooden toggle specified in clause 10 shall be attached by splicing the hemp cord around it before sewing the latter inside the sleeve, as shown in Fig 2.

5.7 The motor car flag shall be made from two layers of the khadi bunting sewn together as indicated in Fig 3, with the white cotton sewing thread, fine (clause 8) and provided with a brass wire of gauge No. 12 SWG (Diameter 0.104 in. or 2.64 mm), shaped in accordance with Fig 3.

6. COTTON KHADI BUNTING

6.1 Yarn - The yarn for both warp and weft used in weaving the cotton khadi bunting shall be two-fold yarn prepared by twisting together hand-spun single yarn of 20s count of reasonable evenness and shall comply with the specifications given in Table III, the test methods specified in the last column being used for determining the values of the various characteristics.

TABLE III SPECIFICATIONS FOR YARN FOR COTTON KHADI BUNTING
(See clause 6.1)

Characteristic	Value	Tolerance	Method of Test
1. Count			
Single	20s	±10%	*IS:237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gk)
Folded	20s/2	±10%	
2. Twist			
Single	18 turns per in.	±1 turn per in.	*IS:238-1951 Determination of Twist in Cotton Yarn.
Folded	11 turns per in.	±1 turn per in.	

* Under preparation

NOTE: To convert inches to centimeters, multiply by 2.54.

6.2 Bunting - The bunting shall be hand-woven from the yarn specified in clause 6.1, shall be of plain weave and reasonably free from flaws and other weaving defects. The bunting for the white panel shall be bleached and that for the coloured panels shall be bleached and dyed.

6.2.1.....

6.2.1 Construction. The bleached as well as the dyed bunting (See clauses 6.2.3 and 6.3) shall conform to the constructional details given in Table IV, the test methods specified in the last column being used for determining the values of the various characteristics.

6.2.2 Width. The width of the bunting shall be as ordered by the purchaser and shall be determined in accordance with *IS:241-1951 Method for the Determination of Cotton Fabric Dimensions. The tolerance in width shall be subject to purchaser's requirements.

TABLE IV CONSTRUCTIONAL DETAILS OF COTTON KHADI BUNTING IN BLEACHED AND IN DYED STATE
(See clause 6.2.1)

Characteristic	Value	Tolerance	Method of Test
1. Threads per inch			
Warp	44	±1	*IS:240-1951 Determination of Ends and Picks in Woven Cotton Fabrics.
Weft	42	±4	
2. Weight, oz per sq yd	6.0	±0.5	*IS:242-1951 Determination of Weight per Unit Area or Unit Length of Cotton Fabric.
3. Breaking Load (for 2 in. x 8 in. test piece), minimum, lb			*IS:243-1951 Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabrics (by Constant-Rate-of-Traverse Method).
Warp	90	- 0	
Weft	85	- 0	
4. Shrinkage, maximum, percent	2	+ 0	IS:9-1949 Test for Determining Shrinkage in Woven Cotton and Linen Cloth on Washing.

*Under preparation

NOTE: To convert inches into centimeter, multiply by 2.54 and lb into kg by 0.4536.

6.2.3 Dyeing. The bunting for the India Saffron (Kesari) and India Green panels of the flag shall be piece dyed with suitable dyes necessary to produce the required colour (See clause 6.3). The dyed bunting and the dyes used in the chakra shall be fast to light and to wash as follows:

a) Fastness to light when tested in accordance with the method described in Appendix A shall be of class 6 or better.

b) Fastness to wash shall be such that, when tested according to the method described in Appendix B, the fabric shall not change in shade or show any sign of bleeding.

6.3.....

6.3 Colours - The three colours in the bunting, viz. India Saffron (Kesari), India Green and Navy Blue (of the chakra) shall correspond, when visually examined in ordinary daylight, to the colours in the sealed standard flag held in the custody of the Indian Standards Institution (See clause 2.1).

NOTE: Spectrophotometric values of the India Saffron (Kesari) and India Green colours in the flag presented to the Constituent Assembly (see Foreword) were measured by the Technical Development Establishment Laboratory (Stores), Kanpur, using the illuminant C as specified by the International Commission on Illumination and found to be as follows:

Colour	Trichromatic Values			Brightness
	X(Red)	Y(Yellow)	Z(Blue)	Percent
India Saffron	0.538	0.360	0.102	21.5
India Green	0.288	0.395	0.317	8.9

It is intended that the flags made to conform to this Standard should have colours approximating as closely as possible to the colours as defined above. For all practical purposes, however, correspondence to the sealed standard flag (clause 2.1) shall be considered adequate.

For the purpose of controlling production, sample pieces of bunting dyed to the standard colours may be obtained at nominal cost from the Indian Standards Institution.

7. COTTON DUCK

7.1 Yarn - The yarn for both warp and weft used in weaving the cotton duck shall be unsized 3-fold yarn prepared by twisting together hand-spun single yarn of 16s count of reasonable evenness, and shall comply with the specifications given in Table V, the test methods specified in the last column being used for determining the values of the various characteristics.

TABLE V SPECIFICATIONS FOR YARN FOR COTTON DUCK
(See clause 7.1)

Characteristic	Value	Tolerance	Method of Test
1. Count			
Single	16s	± 10%	*IS:237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gK).
Folded	16s/3	± 10%	
2. Twist			
Single	16 turns per inch	± 1 turn per inch	*IS:238-1951 Determination of Twist in Cotton Yarn.
Folded	8 turns per inch	± 1 turn per inch	

*Under preparation

NOTE: To convert inches into centimeters, multiply by 2.54.

7.2.....

7.2 Duck - The duck shall be hand-woven from the yarn specified in 7.1, shall be of plain weave and reasonably free from flaws and other weaving defects. It shall be used in the grey loom state and shall conform to the constructional details given in Table VI, the test methods specified in the last column being used for determining the values of the various characteristics.

TABLE VI CONSTRUCTIONAL DETAILS OF COTTON DUCK GREY
(See clause 7.2)

Characteristic	Value	Tolerance	Method of Test
1. Threads per in.			
Warp	40	± 1	*IS:240-1951 Determination of Ends and Picks in Woven Cotton Fabrics.
Weft	34	± 3	
2. Weight, oz per sq yd	10.5	± 1	*IS:242-1951 Determination of Weight per Unit Area or Unit Length of Cotton Fabric.
3. Breaking Load, (for 2 in. x 8 in. test piece) minimum, lb			*IS:243-1951 Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabric (by Constant-Rate-of-Traverse Method).
Warp	105	- 0	
Weft	90	- 0	

*Under preparation

NOTE: To convert inches into centimeters, multiply by 2.54 and lb into kg by 0.4536

7.2.1 The width of the cotton duck shall be as ordered by the purchaser (for Method of Test, see IS:241-1951).

8. SEWING THREADS

8.1 All sewing threads shall be well-spun, evenly twisted, free from knots, short lengths and other defects, and shall conform to the particulars given in Table VII.

TABLE VII PARTICULARS OF THREADS
(Clause 8.1)

Type	Count (or cord)	*Twist	Single Thread Breaking Strength, Minimum lb (kg)	Use
a) Cotton Sewing Thread, fine	36s/6	36Z/2Z/3S or 36S/2S/3Z	5.0(2.27)	For stitching Bunting (Clause 5.1)
b) Cotton Sewing Thread, Coarse	22s/9	22Z/3Z/3S or 22S/3S/3Z	13.0(5.90)	For stitching Hemp Cord in Sleeve (Clause 5.5)
c) Flax Thread	3 cord	Z/3S or S/3Z	7.0(3.18)	As alternative to (b) above.

Table VII (Contd)...

(254)

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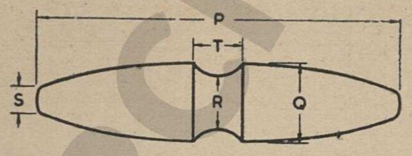

Fig 4 Wooden Toggle

TABLE VII PARTICULARS OF THREADS
(Clause 8.1) (contd)

Type	Count (or cord)	*Twist	Single Thread Breaking Strength, Minimum lb (kg)	Use
Method of Test	IS:237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gK).		Appendix C	For determining the respective characteristics

*Explanation of Twist Designation - The designation 36Z/2Z/3S, for example, means that the single yarn of 36s count having 'Z' twist is taken, and two such single yarns are twisted in 'Z' direction, and finally three such two-fold yarns are twisted in 'S' direction to obtain the final thread of 36s/6 count.

8.2 Cotton sewing thread, fine (item (a) Table VII) shall be required in three colours, namely, White, India Saffron (Kesari), and India Green (See 5.1). The dyed threads shall comply with the requirements specified in clauses 6.2.3 and 6.3.

9. HEMP CORDAGE

9.1 Hemp cordage (clause 5.4) shall be manufactured from clean, good quality hemp, free from impurities, and shall conform to the particulars given in Table VIII:

TABLE VIII CONSTRUCTIONAL DETAILS OF HEMP CORDAGE
(See clause 9.1)

Size (Circumference) in. (mm)	No. of threads in strand	No. of strands in cord	*Twist	Breaking Strength lb (kg)	Length of coil ft (m)	Weight of coil lb (kg)
3/4(19)	12	3	Z/12S/3Z or S/12Z/3S	336(152)	720(219.5)	12(5.44)
1 (25)	9	3	Z/9S/3Z or S/9Z/3S	616(279)	720(219.5)	26(11.79)
1-1/4(32)	12	3	Z/12S/3Z or S/12Z/3S	784(355)	720(219.5)	34(14.42)

*For twist designation see Note under Table VII

9.1.1 Breaking strength shall be determined according to the method described in Appendix D.

10. WOODEN TOGGLES

10.1 Wooden toggles (clause 5.6) shall be manufactured in conformity with the details given in Fig 4 and Table IX, from one of the following species of well-seasoned timber free from defects:

Teak	Shisham
Sal	Padok

TABLE IX.....

TABLE IX DIMENSIONS OF WOODEN TOGGLE
(See Fig 4 and clauses 5.6 and 10.1)

All dimensions in millimeters

For Flag No.	For Cord or Circumference	Length	Diameters			Grove
		P	Q	R	S	T
1	32	90	20	13	5	11
2	25	75	16	11	5	10
3 & 4	19	65	14	11	3	6

APPENDIX A
(Clauses 6.2.3 and 8.2)

METHOD OF TEST FOR COLOUR FASTNESS TO LIGHT

1. STANDARD PATTERN

1.1 The standard pattern issued by the British Standards Institution and available from the Indian Standards Institution for testing class 6 fastness to light shall be used for the purpose of this test. This pattern consists of a piece of wool fabric dyed with 2.5 percent Alizarine Light Blue 4^{GL}(S).

2. TEST SAMPLE

2.1 Cloth - Two 2.5 x 3 in. (or 6 x 8 cm) specimens of the dyed fabric under test, with the longer dimension running in the direction of the warp shall constitute the test sample.

2.2 Yarn - Two lengths of yarn, each wound closely on a white piece of cardboard measuring 2.5 x 3 in. (or 6 x 8 cm) shall constitute the test sample.

3. EQUIPMENT

3.1 Specimen Holder - Holders made so that a 2.5 x 3 in. (or 6 x 8 cm) specimen can be placed in each of them, in such a manner that the specimen is shielded from light excepting an area of 1.5 x 2 in. (or 4 x 5 cm). This area of the specimen shall be open to the air on both sides.

3.2 Test Cabinet - A cabinet open on the sides to allow free access of air, with the top covered with a good grade of window glass about 1/8 in. (or 3 mm) thick, made so that the test specimen placed in holders can be mounted in the test cabinet at a distance of not less than 0.5 in. (or 13 mm) from the glass.

3.3 Procedure - Place one test specimen in a specimen holder. Place a 2.5 x 3 in. (or 6 x 8 cm) cutting of the standard pattern in a similar holder. Mount both the holders in the test cabinet keeping the distance between the glass and the pieces of the two fabrics not less than 0.5 in. (or 13 mm). Place the test cabinet in a location free from shade so that the specimen holders have an inclination of 45° from the horizontal. Leave the cabinet there between the hours of 9 am and 3 pm for as many days as necessary to obtain a distinct fading in the test specimen mounted in the test cabinet as compared with the unexposed test specimen. Terminate the exposure at this stage.

4.....

4. RESULT

4.1 Exposed specimen of material under test and the exposed cutting of the standard pattern together with unexposed pieces of each shall be placed in the same plane and in such a position that somewhat diffused daylight falls equally on all specimens at an angle of about 45°.

When looked at squarely, the exposed test specimen when compared with the unexposed test specimen shall show distinct fading, but the exposed test specimen shall not show greater change in colour than the exposed cutting of the standard pattern. If the test specimen complies with these requirements its fastness to light shall be deemed to be of class 6 or better.

APPENDIX B
(Clauses 6.2.3 and 8.2)

METHOD OF TEST FOR FASTNESS OF COLOUR TO WASHING

1. TEST LIQUOR

1.1 A solution in distilled water of 0.2 percent (on bone-dry basis) of neutral soap flakes shall constitute the test liquor for this test.

2. TEST SAMPLE

2.1 Cloth - A 4 x 4 in. (or 10 x 10 cm) specimen of dyed cloth under test sewn to a 2 x 4 in. (or 5 x 10 cm) piece of bleached muslin cloth with white cotton thread in such a manner that one half of the dyed specimen is covered while the other half is not, shall constitute the test sample.

2.2 Yarn - Dyed yarn under test, in 4 in. (or 10 cm)/lengths (or pieces), weighing in aggregate from 2 to 3 g, bunched together and tied (or sewn) with white cotton thread firstly to a piece of white muslin and secondly to a piece of scoured woollen fabric, in such a manner that one half of bunch is wrapped around with one layer of muslin and the other half with one layer of woollen fabric, shall constitute the test specimen.

3. EQUIPMENT

3.1 A wash-wheel provided with stainless steel jars with water-tight stoppers, and arranged to rotate in a water bath capable of being heated to 60°C.

4. PROCEDURE

4.1 Place the test sample and the test liquor (weighing about fifty times the weight of the test specimen) in one of the stainless steel jars, using separate jars for different specimens. Close the top of the jars tight and fix them to the wash-wheel. Turn the wash-wheel at 40 RPM for 10 minutes in the water bath maintained at 60°C. Stop the wash-wheel. Change the test liquor Again begin to turn the wash-wheel at 40 RPM in the water bath as before and continue to turn it for one and a half hours. Stop the wash-wheel. Remove the specimens and rinse them well in warm water. Centrifuge, mangle and dry them.

5. RESULTS

5.1 The specimens of dyed cloth and yarn treated as above shall be examined for change of shade in comparison with the original untreated materials. The attached pieces of muslin and woollen material shall be examined for signs of bleeding of colours

from the.....

from the test specimens. The cloth or the yarn shall be deemed to have been dyed fast to wash, if

a) no change in shade from the original is indicated, and

b) no sign of bleeding is observed.

APPENDIX C
(Clause 8.1 and Table VII)

METHOD FOR DETERMINATION OF SINGLE THREAD BREAKING STRENGTH

1. ATMOSPHERIC CONDITIONS FOR TESTING

1.1 The tests shall be carried out in a standard atmosphere at 65 ± 2 percent relative humidity and $27^{\circ} \pm 2^{\circ}$C ($81^{\circ} \pm 4^{\circ}$F) temperature (see also IS:196-1950 Atmospheric Conditions for Testing).

2. CONDITIONING OF SAMPLE

2.1 Prior to test, the sample shall be conditioned to moisture equilibrium in the standard atmosphere (1.1 above).

2.2 When a sample has been left in such an atmosphere for more than 24 hours in such a way as to expose all portions of thread to the atmosphere, it shall be deemed to have reached moisture equilibrium.

3. APPARATUS

3.1 Single Thread Strength Tester - A constant-rate-of-traverse pendulum type of single thread strength testing machine, capable of being calibrated by use of standard weights.

4. METHOD OF TEST

4.1 Fix a length of the thread under test in the jaws of the machine so that the distance between the jaws is 24 in. (or 60 cm). Operate the machine so that the moving jaw traverses at the rate of 12 in. (or 30.5 cm) per minute and note the breaking strength in lb (or kg).

5. RESULT

5.1 Mean of 20 test results shall be taken to be the single thread breaking strength of the sample.

APPENDIX D
(Clause 9.1.1 and Table VIII)

METHOD FOR DETERMINATION OF BREAKING STRENGTH OF HEMP CORDAGE

1. ATMOSPHERIC CONDITIONS FOR TESTING

1.1 The tests shall be carried out in a standard atmosphere at 65 ± 2 percent relative humidity and $27^{\circ} \pm 2^{\circ}$C ($81^{\circ} \pm 4^{\circ}$F) temperature (see also IS:196-1950 Atmospheric Conditions for Testing).

2. CONDITIONING OF SAMPLE

2.1 Prior to test, the sample shall be conditioned to moisture equilibrium in the standard atmosphere (1.1 above).

2.2.....

166

2.2 When a sample has been left in such an atmosphere for more than 48 hours in such a way as to expose all portions of the cordage to the atmosphere, it shall be deemed to have reached moisture equilibrium.

3. APPARATUS

3.1 Strength Tester - A constant-rate-of-traverse horizontal type of testing machine, capable of being calibrated by standard weights.

4. METHOD OF TEST

4.1 Fix a length of the cordage under test in the jaws of the machine so that the distance between the jaws is 3 ft (or 92 cm). Operate the machine so that the moving jaw traverses at the rate of 6 in. (or 15 cm) per minute and note the breaking strength in lb (or kg).

5. RESULT

5.1 Mean of 3 test results shall be taken to be the breaking strength of hemp cordage.

'KC'

Sr No 56 (260)

-167-

15 D
On 2/1
Initial
R & I.A

No.41/3/49-Public.
Government of India,
MINISTRY OF HOME AFFAIRS.

New Delhi, the 31st January, 1951.

From

Sri A.V. Raman, M.A.,
Under Secretary to the Govt. of India.

To

The Director,
Indian Standards Institution,
19, University Road, Civil Lines,
DELHI-8.

Subject:- National Flag of India.

Dear Sir,

p 149 cw

Please refer to your letter No.TDC 8/1T of the 20th January 1950 forwarding a copy of the specifications of the National Flag. I have no comments to offer on the specifications sent by you. I also agree with the suggestion made in para.1(iii) of your letter.

2. It is presumed that the Indian Standards Institution will send a sample flag to this Ministry for record when the standard flags are ready.

Yours faithfully,

(A.V. Raman)

Under Secretary to the Government of India.

Sr No.-57 -168- (261)

INDIAN STANDARDS INSTITUTION

Grams : Indstand Delhi
Phones : 6105 ~~5419~~ 5921/4
~~BLOCK II~~ 19, University Road,
~~OLD SECRETARIAT~~ Civil Lines,
DELHI 8, INDIA

Your Ref : 41/3/49-Public dt: 31.1.51
Our Ref : TDC 8/1T
19 February 1951.

Subject : NATIONAL FLAG OF INDIA.

Dy. 1157/51-Pub.
D/21-2-51.

A.V. Raman Esq.,
Under Secretary to the
Government of India,
Ministry of Home Affairs,
NEW DELHI.

p 167 cor

Dear Sir,

With reference to the second para of your letter cited above, I am to inform you that the flags have not yet been received from Mr. Krishnamurthi.

2. I shall revert to the matter when the flags are received.

an 21/2/51
Public
Mr P.S.A.
21/2

Yours faithfully,

Maharaj Kishen.

(Maharaj Kishen)
Assistant Director (Textiles)

'KC'

Serial No. 58

(262) -169-

DELHI TELEPHONE 41/309
MILITARY TRUNK - 452

IMMEDIATE.
No. 02501/137/TDC:8/MG/TD-8 Dy. 1778/51-Pub. d/19-3-51.
ARMY HEADQUARTERS
Master General of the Ordnance Branch
DHQPO NEW DELHI-11 16 Mar 51

SRK
19/3

To

The Chief Supdt. Development, Textiles & Clothing,
Post Box No. 294,
KANPUR.

Subject :- NATIONAL FLAG OF INDIA - COTTON KHADI.

Reference this office No. 02501/137/TDC:8/MG/TD-8 dated 24 Feb 51.

Please expedite manufacture of the flags referred to in the above cited letter and forward them to this office at the earliest along with the one made by you for presentation to the President (since returned to you).

M. Krishnamurthi

for Director of Technical Development.
(M. Krishnamurthi).

Copy to:-

The Director,
Indian Standards Institution,
19, University Road, DELHI -8.

Reference para 2 of his No. TDC:8/2A dated 22 Feb 51.

As originally arranged for, a flag was made by our Kanpur Establishment in a frightful hurry (even ignoring all other urgent committments) so as to be ready for presentation to the President on 26 Jan 51. It was forwarded to the M. of D. for onward transmission to you on 22 Jan 51. It was however learnt later that the Director of I.S.I. intimated on phone to M. of D. that necessary arrangements for the presentation of the Flag on the Republic day had not been made by him.

2636-A

The flag has since been returned to us with the instruction that it should be resubmitted along with a replica, the latter being meant for retention in I.S.I. as a sealed sample.

This replica is now being made and will be forwarded when ready, along with the flag intended for presentation to the President.

It is learnt that the intention of the I.S.I. now is to put up the flags before the General Council of the I.S.I. and then arrange a short ceremony for presenting to the President sometime later. From what transpired at the December 1950 meeting of the Sectional Committee this was NOT the intention.

Would the Director of I.S.I. please let us know his firm proposals in the matter now.

2. Ministry of Home Affairs.

For the attention of Shri A.V. Raman. Reference his D.O. letter dated 5 Jan 51 to Mr. M. Krishnamurthi.

M.

17 MAR

p.36/notes

S. no 59.

263

170.

No.2501/137/TDC.8/MG/TD-8/2557/D(0),
Government of India,
Ministry of Defence,
New Delhi, the 18th April 1951.

D.2578/51-Pub.
D/17-4-51.
P.131/[illegible]

MEMORANDUM.

NATIONAL FLAG OF INDIA.

Reference :- Ministry of Home Affairs D.O. No.41/3/49-Public, dated the 28th December 1950 from Shri A.V.Raman to Shri M.Krishnamurthi.

Three Samples of the National flag of India size 3' x 2' and two samples of motor car flags size 9" x 6" made from cotton khadi according to Indian Standards Institution specifications are forwarded herewith for onward transmission to the Indian Standards Institution Directorate.

2. It will be appreciated if at the time of presenting one of the flags to the President the fact that this has been prepared at one of the Defence Laboratories is brought to his notice.

Flags are with me. above draft below.
AR 19/4/51
Sent to Shri. [illegible] (after [illegible] Go.).

B Bose
(P.C.BOSE)
Under Secretary to the Government of India.

Ministry of Home Affiars.
(For attention of Shri A.V.Raman).

PNM/18.4.

(864) -171-

S. No. 60

R+I.
Please issue D.O. at once.

41/3/49-Public.
D.O. No. ~~41/1/50~~ Public.

New Delhi, the 20th April 1951.

PS
20.4.51

ISSUED
20/4

Sent

Dear Shri Maharaj Kishen,

Reference my telephonic conversation tof to-day.

I forward herewith samples of the National Flag of India recevied from the Kanpur laboratory of the Defence Ministry :-

3 flags size .. 3' x 2'
2 flags (motor car) size 9" x 6"

Will you please acknowledge them?

2. Please ask for more so that we can have a sample on our file.

3. We hope that the presentation of the flag to the President will soon take place.

Yours sincerely,

A V Raman 20/4
(A. V. Raman)

Shri Maharaj Kishen,
Assistant Director,
Indian Standards Institution,
No. 19, University Road, Delhi.

Sr. No 61

265

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THE INDIAN STANDARDS INSTITUTION

Telegrams :
'INDSTAND' Delhi

19 University Road
Delhi-8.

24 April 1951

P. 171/Gr

Our Ref : TDC 8/1 T
Your Ref : D.O. No. 1.41/3/49 - Public dated 20 April 1951.
Subject : National Flag of India - Cotton Khadi

Dear Sir,

We acknowledge with thanks the receipt of your above communication with enclosures, contents of which have been noted.

Yours faithfully,

for Asstt. Director ~~Secretary~~
(Textiles)

266

25/4/51

Public

-173

R.S.

LOCAL DELIVERY

POST CARD

ADDRESS ONLY

POSTAGE
KONARAK HORSE
6 Ps INDIA

NEW DELHI
DELHI
25 APR. 51
8

To A.V. Raman, Esqr.,
Ministry of Home Affairs
Govt of India
NEW DELHI.

Sr. No. 62. (267) D/2993/51 Pl
16/5

-173-

INDIAN STANDARDS INSTITUTION

Member, International Organization for Standardization (ISO)

Grams : Indstand Delhi
Phones : 5921/4 6105 ~~3419~~
19 University Road
Civil Lines
Delhi 8, India

Your Ref : --

Our Ref : TDC 8/2A

8 May 1951.

Subject : NATIONAL FLAG OF INDIA

The Chief Superintendent Development,
Textiles and Clothing,
Post Box No.294, KANPUR.

not on file

Dear Sir,

4 p. 171/cor.

I would refer you to this Directorate's letter No.TDC 8/2A dated 3 January 1951, and would acknowledge receipt of National Flags of India, three of 3 x 2 ft size and two of motor car size, through Mr. A.V. Raman of the Ministry of Home Affairs.

2. The examination of the flags shows that, by and large, the flags have been made in accordance with the requirements of the Indian Standard Specification for the National Flag of India (Cotton Khadi). However, there are a few discrepancies which are detailed below:

a) The Asoka Chakra has not been properly stencilled on the middle panel. Some of the spokes of the Chakra have been brought to proper dimensions by superimposing white paint on imperfections and defects;

b) Two of the spokes of the Chakra on all flags should have been exactly vertical and another two exactly horizontal. This requirement has not been met;

c) i) One of the three large size flags is 35.5 x 23.9 in. instead of 36 x 24 in.

ii) Dimension 'E' of the loop of hemp cord of this flag measures 70 mm instead of 64 mm and dimension 'F' 40 mm instead of 51;

d) In the two motor car flags, dimensions 'J' and 'K' of the Chakra measure 38 mm and 32 mm instead of 40 mm and 35 mm, respectively;

e) All the five flags seem to have been soiled during the process of manufacture.

3. One of the 3 x 2 ft flags is intended to be presented to the Hon'ble President of India and the other to form a "sealed sample" of the standard flag. The third is intended to be a "sub-standard" flag, kept in the custody of the ISI, for

day-to-day ....

day-to-day reference work. For all these purposes soiled flags cannot obviously be used.

4. I shall be glad to know if you can treat the flags in such a manner as to remove the defects named in (a) to (e) of para 2 above. If so, I shall be glad to send the flags to you.

5. Further, a certificate from you confirming that (a) the trichromatic values of the flags have been tested and found in conformity with the requirements of the Indian Standard Specification for the National Flag of India, or (b) that the deviations between the prescribed and the observed values are of a negligible order, would also be required, before the flags can either be presented to the Hon'ble President as India's National Flag, or used as a "sealed sample." In this connection, I may state that the trichromatic values of Navy blue colour of the Chakra have to be tested against similar values of the dyed piece of woollen bunting marked 1, sent by you on 22 March 1951 vide TC/4309/Tex/C.

Yours faithfully,

(Maharaj Kishen)
Assistant Director (Textiles)

opy to:

1. Mr. M. Krishnamurthi,
   Directorate of Technical Development,
   M.G.O. Branch,
   Army Headquarters India, NEW DELHI.
2. ✓ Mr. A.V. Raman,
   Under Secretary to the Govt. of India,
   Ministry of Home Affairs, New Delhi.
3. Sri Dwarka Nath Lele,
   All India Spinners' Association,
   Sevagram, WARDHA.

Assistant Director(Textiles)

S. No. 63.

(269) 175

INDIAN STANDARDS INSTITUTION

Grams: Indstand Delhi • Phones: 6105 ~~5419~~
• ~~BLOCK XIX~~ 19 University Road,
• ~~OLD SECRETARIAT~~ Civil Lines,
• DELHI 8, INDIA

13 June 1951.

Your Ref:
Our Ref:

Subject: INDIAN STANDARD SPECIFICATION FOR THE NATIONAL FLAG OF INDIA (COTTON KHADI).

D.3457/51-Public
14-6-51

The Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

Attention: Mr. A.V. Raman

Dear Sir,

I have pleasure in enclosing two copies of IS:1-1951 Indian Standard Specification for the National Flag of India (Cotton Khadi), which has just been published. It is requested that the Government of India may take appropriate action for adopting this standard as official standard on National Flag, and give it as much publicity as possible for its widespread adoption.

Pb
on
14/6/51

Public

Yours faithfully,

Encl:2.

Lal C Verman

(Lal C. Verman),
Director.

VSM.

PS (W. 13.6.51)
14/6

270
176-

IS : 1 - 1951

Indian Standard

SPECIFICATION FOR THE NATIONAL FLAG OF INDIA (COTTON KHADI)

U.D.C.
929·9 (54) : 677·21·064] (083·75) (54)

National Flag Sectional Committee, TDC 8

Chairman	
Mr. Bharat Ram	Delhi Cloth and General Mills Co. Ltd., Delhi
Members	
Mr. M. Krishnamurthi	Ministry of Defence, New Delhi
Mr. Dwarka Nath Lele	All-India Spinners' Association, Wardha
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Dr. N. L. Narayan	Government of Rajasthan, Jaipur
Mr. A. V. Raman	Ministry of Home Affairs, New Delhi
Mr. Vichitra Narain Sharma	Shri Gandhi Ashram, Meerut
Mr. Randhir Singh	Directorate General of Industries and Supplies, New Delhi
Dr. Lal C. Verman (*Ex-officio*)	Director, Indian Standards Institution, Delhi
Staff	
The Late Mr. C. P. Halkatti	*Formerly* Assistant Director (Textiles), ISI, Delhi
Mr. Maharaj Kishen	Assistant Director (Textiles), ISI, Delhi
Mr. T. Balakrishnan	Technical Assistant, ISI, Delhi

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Indian Standard

SPECIFICATION FOR THE NATIONAL FLAG OF INDIA (COTTON KHADI)

FOREWORD

The Honourable Shri Jawaharlal Nehru presented to the Constituent Assembly of India on 22 July 1947, two flags, one of silk and the other of cotton khadi, specially designed and manufactured for adoption as the National Flag of India. He moved the following Resolution :

> " Resolved that the National Flag of India shall be a horizontal tricolour of deep saffron (Kesari), white and dark green in equal proportion. In the centre of the white band, there shall be a wheel in Navy Blue to represent the Charkha. The design of the Wheel shall be that of the Wheel (Chakra) which appears on the abacus of the Sarnath Lion Capital of Asoka. The diameter of the Wheel shall approximate to the width of the white band. The ratio of the width to the length of the Flag shall ordinarily be 2 : 3."

The motion was adopted, the whole Assembly standing.

This Resolution did not purport to furnish full details regarding the quality of the cloth and other particulars required for the manufacture of flags. Hence the necessity arose for the preparation of self-contained specifications for the National Flag of India.

The Army Headquarters, who had issued a working drawing for the National Flag for the use of the Army, suggested to the Indian Standards Institution to issue a standard for the National Flag on the basis of their requirements.

The Government of India in the meanwhile expressed a desire that the cloth used for the manufacture of the Flag for use by Government should be hand-spun and hand-woven khadi. Accordingly it was decided to formulate standards of the National Flag involving the use of hand-spun and hand-woven cotton, woollen and silk fabrics.

This standard deals only with the National Flag made of cotton khadi. Standards for National Flags made of wool and silk are being dealt with separately.

The use of this standard requires reference to the following Indian Standards :

IS : 9-1949	Method of Test for Determining Shrinkage in Woven Cotton and Linen Cloth on Washing
IS : 237-1951	Method for the Determination of Cotton Yarn Count (or Yarn Melidity in gK)
IS : 238-1951	Method for the Determination of Twist in Cotton Yarn
IS : 240-1951	Method for the Determination of Ends and Picks in Woven Cotton Fabrics
IS : 241-1951	Method for the Determination of Cotton Fabric Dimensions
IS : 242-1951	Method for the Determination of Weight per Unit Area or Unit Length of Cotton Fabrics
IS : 243-1951	Method for the Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabric (by Constant-Rate-of-Traverse Method)

Except IS : 9-1949 which is already published, all these standards are in advanced stages of preparation and are expected to be published soon.

In the preparation of this standard, considerable assistance has been received from the All-India Spinners' Association, Government of Rajasthan, the Directorate of Technical Development (Ministry of Defence), Department of Chemical Technology (University of Bombay), and others.

---

1. SCOPE

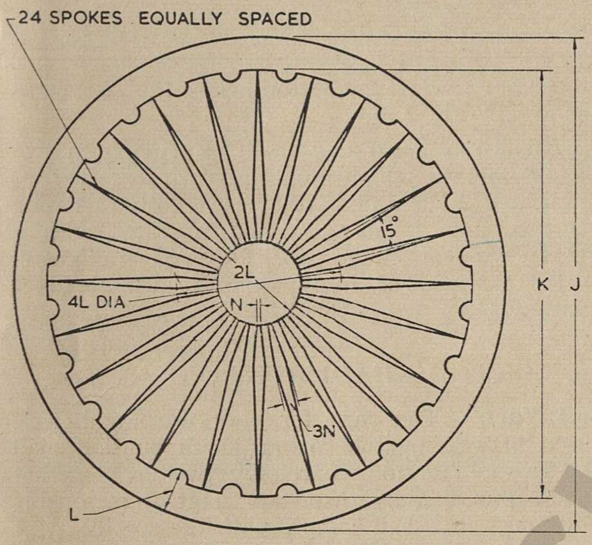
1.1 This standard prescribes the design and construction of the National Flag of India (Cotton Khadi) made of hand-spun and hand-woven cotton khadi material. It also covers the specifications of the materials to be used in the manufacture of the Flag.

2. CONFORMITY TO SEALED STANDARD FLAG

2.1 All flags made to this standard, besides satisfying the requirements of this standard, shall be in general conformity with the sealed standard National Flag of India (Cotton Khadi) held in the custody of the Indian Standards Institution.

3. GENERAL DESIGN

3.1 The Flag shall be a tricolour rectangular panel, made up of three rectangular panels or sub-panels of equal width. The colour of the top panel shall be India saffron (Kesari) and of the bottom panel India green. The middle panel shall be white, bearing in the centre the design of the Asoka Chakra, in Navy blue colour conforming in dimensions to Fig 1 and Table I.


24 SPOKES EQUALLY SPACED
15°
2L
4L DIA
N
K
J
3N
L

(Fig 1 Design of Asoka Chakra)

TABLE I DIMENSIONS OF ASOKA CHAKRA FOR DIFFERENT SIZES OF FLAGS

(*Clause* 3.1, *see also Fig* 1)

(All dimensions in millimeters)

Flag Size No.	J	K	L	N
1	1400	1240	110	11·0
2	790	700	62	6·0
3	390	345	30	3·0
4	190	165	16	1·5
5	40	35	3·5	0·4

3.2 The Chakra shall preferably be screen-printed on both sides of the Flag, or otherwise printed or stencilled, or suitably embroidered, on both sides in all cases.

3.3 The standard ratio of the height (or width) to the length of the Flag shall be two to three (2 : 3).

4. STANDARD SIZES

4.1 There shall be five standard sizes of the Flag, four as specified in Fig 2 and Table II, the fifth and the smallest size, designated No. 5, as specified in Fig 3, for use on motor cars.

4.2 Flags of other sizes and having height to length ratio different from 2 : 3, if required to be made for special purposes, shall in all other respects be in conformity with this standard.

5. CONSTRUCTION

5.1 All National Flags of India (Cotton Khadi) shall be made from cotton khadi bunting specified in clause **6**. The panels shall be stitched with cotton sewing thread, fine, specified in clause **8**, of the colour matching the shade of the panel against which it appears in the finished Flag. The stitching shall be in accordance with the details shown in Fig 2 and 3 and the number of stitches shall be at least 10 per inch (or 4 per cm).

5.2 All flags shall have a cotton duck sleeve of the size and construction shown in Fig 2 and 3 and Table II, and made of the material specified in clause **7**.

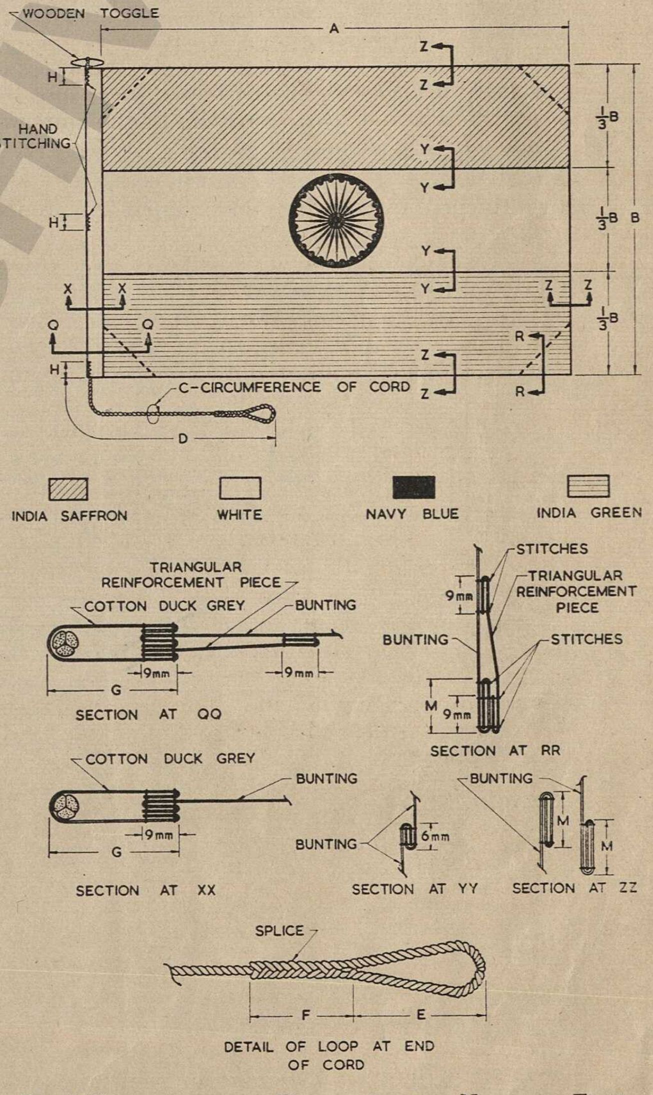

WOODEN TOGGLE
A
H
HAND STITCHING
Z
Y
X
Q
R
1/3 B
B
C—CIRCUMFERENCE OF CORD
D
▨ INDIA SAFFRON
☐ WHITE
■ NAVY BLUE
▤ INDIA GREEN
TRIANGULAR REINFORCEMENT PIECE
COTTON DUCK GREY
BUNTING
9mm
G
SECTION AT QQ
STITCHES
TRIANGULAR REINFORCEMENT PIECE
BUNTING
STITCHES
M
SECTION AT RR
COTTON DUCK GREY
BUNTING
SECTION AT XX
6mm
SECTION AT YY
SECTION AT ZZ
SPLICE
F
E
DETAIL OF LOOP AT END OF CORD

Fig 2 Constructional Details of the National Flag

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TABLE II DIMENSIONS OF DIFFERENT SIZES OF FLAGS

(*Clause* 4.1, *see also Fig* 2)

Flag Size No.	Overall Flag Dimensions				Hem		Sleeve				Hemp Cord and Loop							
	A		B		M		G		H		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
1	252	6400	168	4270	1	25	2½	64	1⅝	41	1¼	32	84	2140	3	76	2½	64
2	144	3660	96	2440	½	13	2	51	1⅝	41	1	25	48	1220	3	76	2½	64
3	72	1830	48	1220	½	13	1½	38	1⅝	41	¾	19	24	610	3	76	2½	64
4	36	915	24	610	½	13	1¼	32	1¼	32	¾	19	12	305	2½	64	2	51
5*	9	228	6	152	—	—	½	13	—	—	—	—	—	—	—	—	—	—

**See* Fig 3

5.3 The four corners of all flags, except the motor car flag, shall be reinforced in the manner indicated in Fig 2, by triangular pieces of bunting of the same colour as the panels on which they appear.

5.4 A length of hemp cord shall be hand-stitched inside the sleeve and shall be of the size and style as specified in Fig 2 and Table II. The cordage shall comply with the requirements of clause **9**.

5.5 The flax or cotton sewing thread, coarse, specified in clause **8**, shall be used in sewing the hemp cord inside the sleeve in the manner indicated in Fig 2 and Table II.

5.6 A wooden toggle, specified in clause **10**, shall be attached by splicing the hemp cord around it before sewing the latter inside the sleeve, as shown in Fig 2.

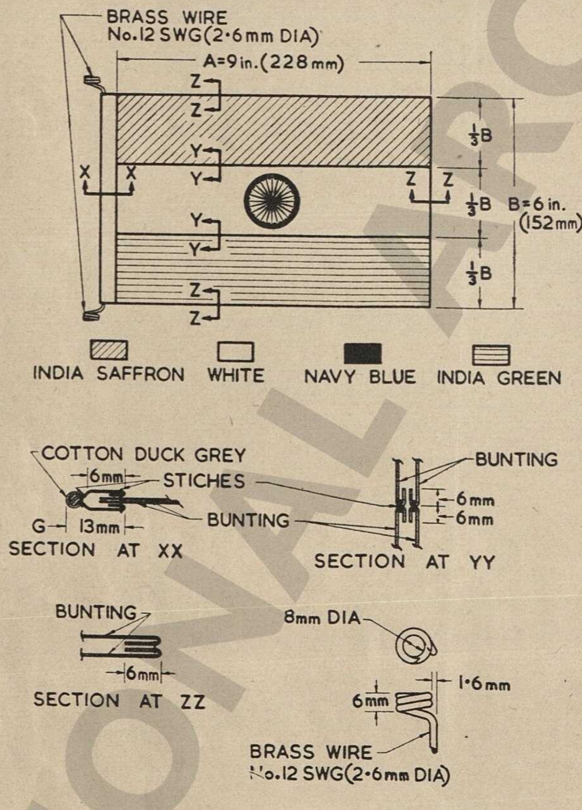

Fig 3 Constructional Details of the National Flag for Motor Car

5.7 The motor car flag shall be made from two layers of the khadi bunting sewn together as indicated in Fig 3, with white cotton sewing thread, fine, (clause **8**) and provided with a brass wire of gauge No. 12 SWG (diameter 0·104 in. or 2·64 mm), shaped in accordance with Fig 3.

6. COTTON KHADI BUNTING

6.1 Yarn — The yarn for both warp and weft used in weaving the cotton khadi bunting shall be two-fold yarn prepared by twisting together hand-spun single yarn of 20s count of reasonable evenness and shall comply with the specifications given in Table III, the test methods specified in the last column being used for determining the values of the various characteristics.

6.2 Bunting — The bunting shall be hand-woven from the yarn specified in clause **6.1**, and shall be of plain weave and reasonably free from flaws and other weaving defects. The bunting for the white panel shall be bleached and that for the coloured panels shall be bleached and dyed.

6.2.1 *Construction* — The bleached as well as the dyed bunting (*see* clauses **6.2.3** and **6.3**) shall conform to the constructional details given in Table IV, the test methods specified in the last column being used for determining the values of the various characteristics.

6.2.2 *Width* — The width of the bunting shall be as ordered by the purchaser and shall be determined in accordance with *IS : 241-1951 Method for the Determination of Cotton Fabric Dimensions. The tolerance in width shall be subject to purchaser's requirements.

6.2.3 *Dyeing* — The bunting for the India saffron (Kesari) and India green panels of the Flag shall be piece dyed with suitable dyes necessary to produce the required colour (*see* clause the **6.3**). The dyed bunting and the dyes used in Chakra shall be fast to light and to wash as follows:

a) Fastness to light when tested in accordance with the method described in Appendix A shall be of class 6 or better, and

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*Under preparation

TABLE III SPECIFICATIONS FOR YARN FOR COTTON KHADI BUNTING

(*Clause* 6.1)

CHARACTERISTIC	VALUE	TOLERANCE	METHOD OF TEST
1. Count :			
Single	20s	±10%	*IS : 237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gK)
Folded	20s/2	±10%	
2. Twist :			
Single	18 turns per in.	±1 turn per in.	*IS : 238-1951 Determination of Twist in Cotton Yarn
Folded	11 turns per in.	±1 turn per in.	

* Under preparation

NOTE — To convert inches to centimeters, multiply by 2·54

TABLE IV CONSTRUCTIONAL DETAILS OF COTTON KHADI BUNTING IN BLEACHED AND IN DYED STATE

(*Clause* 6.2.1)

CHARACTERISTIC	VALUE	TOLERANCE	METHOD OF TEST
1. Threads per in. :			
Warp	44	±1	*IS : 240-1951 Determination of Ends and Picks in Woven Cotton Fabrics
Weft	42	±4	
2. Weight, oz per sq yd	6	±0·5	*IS : 242-1951 Determination of Weight per Unit Area or Unit Length of Cotton Fabric
3. Breaking Load (for 2 in. × 8 in. testpiece) *minimum*, lb :			
Warp	90	−0	*IS : 243-1951 Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabrics (by Constant-Rate-of-Traverse Method)
Weft	85	−0	
4. Shrinkage, *maximum*, percent	2	+0	IS : 9-1949 Test for Determining Shrinkage in Woven Cotton and Linen Cloth on Washing

* Under preparation

NOTE — To convert inches into centimeters, multiply by 2·54, and lb into kg by 0·4536

b) Fastness to wash shall be such that, when tested according to the method described in Appendix B, the fabric shall not change in shade or show any sign of bleeding.

6.3 Colours — The three colours in the bunting, viz, India saffron (Kesari), India green and Navy blue (of the Chakra) shall correspond, when visually examined in ordinary daylight, to the colours in the sealed standard Flag held in the custody of the Indian Standards Institution (*see* clause **2.1**).

NOTE — Spectrophotometric values of the India saffron (Kesari) and India green colours in the Flag presented to the Constituent Assembly (*see* Foreword) were measured by the Technical Development Establishment Laboratory (Stores), Kanpur, using the illuminant C as specified by the International Commission on Illumination, 1931, and found to be as follows :

COLOUR	TRICHROMATIC VALUES			BRIGHTNESS, Percent
	x	y	z	
India saffron	0·538	0·360	0·102	21·5
India green	0·288	0·395	0·317	8·9
White	0·313	0·319	0·368	72·6

It is intended that the flags made to conform to this standard should have colours approximating as closely as possible to the colours as defined above. For all practical purposes, however, correspondence to the sealed standard flag (clause **2.1**) shall be considered adequate.

For the purpose of controlling production, sample pieces of bunting dyed to the standard colours may be obtained at nominal cost from the Indian Standards Institution.

7. COTTON DUCK

7.1 Yarn — The yarn for both warp and weft used in weaving the cotton duck shall be unsized three-fold yarn prepared by twisting together hand-spun single yarn of 16s count of reasonable evenness, and shall comply with the specifications given in Table V, the test methods specified in the last column being used for determining the values of the various characteristics.

7.2 Duck — The duck shall be hand-woven from the yarn specified in **7.1**, and shall be of plain weave and reasonably free from flaws and other weaving defects. It shall be used in the grey loom state and shall conform to the constructional details given in Table VI, the test methods specified in the last column being used for determining the values of the various characteristics.

7.2.1 The width of the cotton duck shall be as ordered by the purchaser (*for* Method of Test, *see* *IS : 241-1951 Method for the Determination of Cotton Fabric Dimensions).

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*Under preparation

TABLE V SPECIFICATIONS FOR YARN FOR COTTON DUCK

(*Clause* 7.1)

Characteristic	Value	Tolerance	Method of Test
1. Count :			
Single	16s	±10%	*IS : 237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gK)
Folded	16s/3	±10%	
2. Twist :			
Single	16 turns per in.	±1 turn per in.	*IS : 238-1951 Determination of Twist in Cotton Yarn
Folded	8 turns per in.	±1 turn per in.	

* Under preparation

NOTE — To convert inches into centimeters, multiply by 2·54

TABLE VI CONSTRUCTIONAL DETAILS OF COTTON DUCK GREY

(*Clause* 7.2)

Characteristic	Value	Tolerance	Method of Test
1. Threads per in. :			
Warp	40	±1	*IS : 240-1951 Determination of Ends and Picks in Woven Cotton Fabrics
Weft	34	±3	
2. Weight, oz per sq yd	10·5	±1	*IS : 242-1951 Determination of Weight per Unit Area or Unit Length of Cotton Fabric
3. Breaking Load (for 2 in. × 8 in. test piece) *minimum*, lb :			
Warp	105	−0	*IS : 243-1951 Determination of Breaking Load (Strength) and Extension of Woven Cotton Fabric (by Constant-Rate-of-Traverse Method)
Weft	90	−0	

* Under preparation

NOTE — To convert inches into centimeters, multiply by 2·54, and lb into kg by 0·4536

TABLE VII PARTICULARS OF THREADS

(*Clause* 8.1)

Type	Count (or cord)	*Twist	Single-Thread Breaking Strength, *Minimum* lb (kg)	Use
a) Cotton Sewing Thread, Fine	36s/6	36Z/2Z/3S or 36S/2S/3Z	5·0 (2·27)	For stitching bunting (clause **5.1**)
b) Cotton Sewing Thread, Coarse	22s/9	22Z/3Z/3S or 22S/3S/3Z	13·0 (5·90)	For stitching hemp cord in sleeve (clause **5.5**)
c) Flax Thread	3 cord	Z/3S or S/3Z	7·0 (3·18)	As alternative to (b) above
Method of Test	IS : 237-1951 Determination of Cotton Yarn Count (or Yarn Melidity in gK).	—	Appendix C	For determining the respective characteristics

* *Explanation of Twist Designation* — The designation 36Z/2Z/3S, for example, means that the single yarn of 36s count having 'Z' twist is taken, and two such single yarns are twisted in 'Z' direction, and finally three such two-fold yarns are twisted in 'S' direction to obtain the final thread of 36s/6 count.

8. SEWING THREADS

8.1 All sewing threads shall be well spun, evenly twisted, free from knots, short lengths and other defects, and shall conform to the particulars given in Table VII.

8.2 Cotton sewing thread, fine [item (a) Table VII] shall be required in three colours, namely, white, India saffron (Kesari), and India green (*see* **5.1**), The dyed threads shall comply with the requirements specified in clauses **6.2.3** and **6.3**.

9. HEMP CORDAGE

9.1 Hemp cordage (clause **5.4**) shall be manufactured from clean, good quality hemp, free from impurities, and shall conform to the particulars given in Table VIII.

9.1.1 Breaking strength shall be determined according to the method described in Appendix D.

TABLE VIII CONSTRUCTIONAL DETAILS OF HEMP CORDAGE

(*Clause* 9.1)

SIZE (CIRCUMFERENCE) in. (mm)	NO. OF THREADS IN STRAND	NO. OF STRANDS IN CORD	*TWIST	BREAKING STRENGTH lb (kg)	LENGTH OF COIL ft (m)	WEIGHT OF COIL lb (kg)
$\frac{3}{4}$ (19)	4	3	Z/4S/3Z or S/4Z/3S	336 (152)	720 (219·5)	12 (5·44)
1 (25)	3	3	Z/3S/3Z or S/3Z/3S	616 (279)	720 (219·5)	26 (11·79)
$1\frac{1}{4}$ (32)	4	3	Z/4S/3Z or S/4Z/3S	784 (355)	720 (219·5)	34 (14·42)

* For twist designation *see* Note under Table VII

10. WOODEN TOGGLES

10.1 Wooden toggles (clause **5.6**) shall be manufactured in conformity with the details given in Fig 4 and Table IX, from one of the following species of well-seasoned timber free from defects :

Teak	Shisham
Sal	Padok

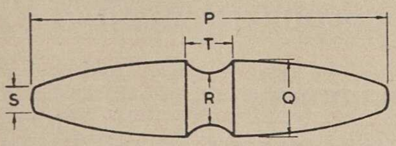

FIG 4 DETAILS OF WOODEN TOGGLE

TABLE IX DIMENSIONS OF WOODEN TOGGLE

(*Clauses* 5.6 and 10.1, *see also Fig* 4)

(All dimensions in millimeters)

FOR FLAG No.	FOR CORD OR CIRCUMFERENCE	LENGTH	DIAMETERS			GROVE
		P	Q	R	S	T
1	32	90	20	13	5	11
2	25	75	16	11	5	10
3 & 4	19	65	14	11	3	6

APPENDIX A

(*Clauses* 6.2.3 and 8.2)

METHOD OF TEST FOR COLOUR FASTNESS TO LIGHT

1. STANDARD PATTERN

1.1 The standard pattern issued by the British Standards Institution and available from the Indian Standards Institution for testing class 6 fastness to light shall be used for the purpose of this test. This pattern consists of a piece of wool fabric dyed with 2·5 percent Alizarine Light Blue 4GL (S).

2. TEST SAMPLE

2.1 Cloth — Two 2·5 × 3 in. (or 6 × 8 cm) specimens of the dyed fabric under test, with the longer dimension running in the direction of the warp, shall constitute the test sample.

2.2 Yarn — Two lengths of yarn, each wound closely on a white piece of cardboard measuring 2·5 × 3 in. (or 6 × 8 cm) shall constitute the test sample.

3. EQUIPMENT

3.1 Specimen Holder — Holders made so that a 2·5 × 3 in. (or 6 × 8 cm) specimen can be placed in each of them in such a manner that the specimen is shielded from light excepting an area of 1·5 × 2 in. (or 4 × 5 cm). This area of the specimen shall be open to air on both sides.

3.2 Test Cabinet — A cabinet open on the sides to allow free access of air, with the top covered with a good grade of window glass about $\frac{1}{8}$ in. (or 3 mm) thick, made so that the test specimen placed in holders can be mounted in the test cabinet at a distance of not less than 0·5 in. (or 13 mm) from the glass.

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4. PROCEDURE

4.1 Place one test specimen in a specimen holder. Place a 2·5 × 3 in. (or 6 × 8 cm) cutting of the standard pattern in a similar holder. Mount both the holders in the test cabinet keeping the distance between the glass and the pieces of the two fabrics not less than 0·5 in. (or 13 mm). Place the test cabinet in a location free from shade so that the specimen holders have an inclination of 45° from the horizontal. Leave the cabinet there between the hours of 9 am and 3 pm for as many days as necessary to obtain a distinct fading in the test specimen mounted in the test cabinet as compared with the unexposed test specimen. Terminate the exposure at this stage.

5. RESULT

5.1 The exposed specimen of the material under test and the exposed cutting of the standard pattern together with unexposed pieces of each shall be placed in the same plane and in such a position that somewhat diffused daylight falls equally on all specimens at an angle of about 45°.

When looked at squarely, the exposed test specimen, when compared with the unexposed test specimen, shall show distinct fading, but the exposed test specimen shall not show greater change in colour than the exposed cutting of the standard pattern. If the test specimen complies with these requirements, its fastness to light shall be deemed to be of class 6 or better.

APPENDIX B

(*Clauses* 6.2.3 and 8.2)

METHOD OF TEST FOR FASTNESS OF COLOUR TO WASHING

1. TEST LIQUOR

1.1 A solution in distilled water of 0·2 percent (on bone-dry basis) of neutral soap flakes shall constitute the test liquor for this test.

2. TEST SAMPLE

2.1 Cloth — A 4 × 4 in. (or 10 × 10 cm) specimen of dyed cloth under test sewn to a 2 × 4 in. (or 5 × 10 cm) piece of bleached muslin cloth with white cotton thread in such a manner that one half of the dyed specimen is covered while the other half is not, shall constitute the test sample.

2.2 Yarn — Dyed yarn under test, in 4 in. (or 10 cm) lengths (or pieces), weighing in aggregate from 2 to 3 g, bunched together and tied (or sewn) with white cotton thread firstly to a piece of white muslin and secondly to a piece of scoured woollen fabric, in such a manner that one half of bunch is wrapped around with one layer of muslin and the other half with one layer of woollen fabric, shall constitute the test specimen.

3. EQUIPMENT

3.1 A wash-wheel provided with stainless steel jars with water-tight stoppers, and arranged to rotate in a water bath capable of being heated to 60°C.

4. PROCEDURE

4.1 Place the test sample and the test liquor (weighing about 50 times the weight of the test specimen) in one of the stainless steel jars, using separate jars for different specimens. Close the top of the jars tight and fix them to the wash-wheel. Turn the wash-wheel at 40 rpm for 10 minutes in the water bath maintained at 60°C. Stop the wash-wheel. Change the test liquor. Again begin to turn the wash-wheel at 40 rpm in the water bath as before and continue to turn it for one and a half hours. Stop the wash-wheel. Remove the specimens and rinse them well in warm water. Centrifuge, mangle and dry them.

5. RESULTS

5.1 The specimens of dyed cloth and yarn treated as above shall be examined for change of shade in comparison with the original untreated materials. The attached pieces of muslin and woollen material shall be examined for signs of bleeding of colours from the test specimens. The cloth or the yarn shall be deemed to have been dyed fast to wash, if

a) no change in shade from the original is indicated, and

b) no sign of bleeding is observed.

APPENDIX C

(*Clause* 8.1 and *Table* VII)

METHOD FOR DETERMINATION OF SINGLE-THREAD BREAKING STRENGTH

1. ATMOSPHERIC CONDITIONS FOR TESTING

1.1 The tests shall be carried out in a standard atmosphere at 65 ± 2 percent relative humidity and 27° ± 2°C (or 81° ± 4°F) temperature. (*See also* IS : 196-1950 Atmospheric Conditions for Testing.)

2. CONDITIONING OF SAMPLE

2.1 Prior to test, the sample shall be conditioned to moisture equilibrium in the standard atmosphere (**1.1** above).

2.2 When a sample has been left in such an atmosphere for more than 24 hours in such a way as to expose all portions of thread to the atmosphere, it shall be deemed to have reached the moisture equilibrium.

3. APPARATUS

3.1 Single-Thread Strength Tester — A constant-rate-of-traverse pendulum type of single thread strength testing machine, capable of being calibrated by use of standard weights.

4. METHOD OF TEST

4.1 Fix a length of the thread under test in the jaws of the machine so that the distance between the jaws is 24 in. (or 60 cm). Operate the machine so that the moving jaw traverses at the rate of 12 in. (or 30·5 cm) per minute and note the breaking strength in lb (or kg).

5. RESULT

5.1 Mean of 20 test results shall be taken to be the single-thread breaking strength of the sample.

APPENDIX D

(*Clause* 9.1.1 and *Table* VIII)

METHOD FOR DETERMINATION OF BREAKING STRENGTH OF HEMP CORDAGE

1. ATMOSPHERIC CONDITIONS FOR TESTING

1.1 The tests shall be carried out in a standard atmosphere at 65 ± 2 percent relative humidity and 27° ± 2°C (or 81° ± 4°F) temperature. (*See also* IS : 196-1950 Atmospheric Conditions for Testing.)

2. CONDITIONING OF SAMPLE

2.1 Prior to test, the sample shall be conditioned to moisture equilibrium in the standard atmosphere (**1.1** above).

2.2 When a sample has been left in such an atmosphere for more than 48 hours in such a way as to expose all portions of the cordage to the atmosphere, it shall be deemed to have reached the moisture equilibrium.

3. APPARATUS

3.1 Strength Tester — A constant-rate-of-traverse horizontal type of testing machine, capable of being calibrated by standard weights.

4. METHOD OF TEST

4.1 Fix a length of the cordage under test in the jaws of the machine so that the distance between the jaws is 3 ft (or 92 cm). Operate the machine so that the moving jaw traverses at the rate of 6 in. (or 15 cm) per minute and note the breaking strength in 1b (or kg).

5. RESULT

5.1 Mean of 3 test results shall be taken to be the breaking strength of hemp cordage.

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IS : 252-1950	CAUSTIC SODA, TECHNICAL	1	4
IS : 253-1950	EDIBLE COMMON SALT	1	8
IS : 254-1950	MAGNESIUM CHLORIDE, TECHNICAL ...	1	4
IS : 255-1950	SODIUM SULPHATE, ANHYDROUS, TECHNICAL	1	4
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IS : 259-1950	AMMONIA ALUM, TECHNICAL ...	1	0
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Subject : IS:1-1951 INDIAN STANDARD SPECIFICATION FOR NATIONAL FLAG OF INDIA (COTTON KHADI).

My dear Raman, kept back separately

I am sending you herewith 11 copies of IS:1-1951 Indian Standard Specification for National Flag of India (Cotton Khadi), for distribution to Part C and Part D States. I am also enclosing a copy of our Press Note on the National Flag Standard for your use.

2. Thank you very much for what you are doing on our behalf.

With best regards,

Yours sincerely,

Lal C. Verman

(Lal C. Verman).

Encl: 12

A.V. Raman, Esq.,
Under Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

VSM.

PRESS INFORMATION BUREAU
GOVERNMENT OF INDIA

NATIONAL FLAG STANDARDISED

New Delhi, May 28, 1951.

Two flags, one of silk and the other of cotton khadi, specially designed and manufactured for the adoption of the National Flag of India, were presented to the Constituent Assembly of India by the Hon'ble Shri Jawaharlal Nehru on July 22, 1947. At the same time, a resolution, moved by the Prime Minister, was adopted by the Assembly in which the broad features of the flag were described. The resolution, naturally, did not purport to furnish full details regarding the quality of the cloth and other particulars required for the manufacture of flags. Necessity, therefore, arose for the preparation of self-contained specifications for the National Flag of India.

The Army Headquarters had issued a working drawing for the National Flag for the use of the Army, and they suggested to the Indian Standards Institution to issue a standard for the National Flag on the basis of their requirements. The Government of India, in the meanwhile, expressed a desire that the cloth used for the manufacture of the flag for use by Government should be hand-spun and hand-woven khadi. Accordingly, it was decided to formulate standards for the National Flag involving the use of hand-spun and hand-woven cotton, woollen and silk fabrics.

The finalised standard just published by the Indian Standards Institution: "Indian Standard Specification for the National Flag of India (Cotton Khadi)", deals only with the National Flags made of cotton khadi. The standards for flags made of wool and silk are under preparation.

The published standard describes with illustrations, the general design and constructional details of the flag in full, and prescribes dimensions of the various parts of the flag standardised to six sizes including the one for motor cars. The standard also lays...

188

(282)

lays down, inter alia, the specifications for the yarn and constructional details of cotton khadi bunting in bleached and in dyed state. For evaluating the specified characteristics, such as colour fastness to light and washing, the standard contains methods of test described in separate appendices.

In order to ensure uniformity of shades of colours in the flag, namely India Saffron, India Green and Navy Blue, it has been necessary to prescribe colour values in terms of trichromatic co-efficients corresponding to the colours of the original Constituent Assembly flags. But with a view to make it possible for cottage and small scale producer to be able to match these colours, the Indian Standards Institution has arranged to issue separately a set of standard colour shade samples at nominal cost.

The standard (IS: 1-1951), priced Rs.2/- per copy is available for sale, and may be had from the Secretary, (Administration), Indian Standards Institution, 19 University Road, Civil Lines, Delhi 8.

CLB/AM.
"405 -- 28.5.51."

583
48
81
549
500

Sr. No. 65 (283) -189-

M. H. A.
~~DEPARTMENT/OF~~FICE

File No.
Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

Issue urgently
12/7

1. Date of despatch 12/7
2. List of enclosures

RECEIVED IN THE R. & I. (A)
Ur. 10/7
Cent No. 595
Typed by
Compared by Popli / Le.

~~No.~~ 41/3/49 Public Dated 11 July 1951

To

Part A & B States.

Subject:- National Flag of India — Indian Standard Specification for (Cotton Khadi) —

Sir,

It is understood that copies of the pamphlet entitled "Indian Standard Specification for the National Flag of India (Cotton Khadi)" which has recently been published by the Indian Standards Institution, Delhi, and which contain full details regarding quality of the cloth and other particulars required for the manufacture of flags have been supplied to the State Governmen direct by the Institution. A copy of the Press-note issued by the Institution in this connection is also enclosed. It is requested that the matter may be given the widest possible publicity and steps ~~may~~ be taken to ensure that the standards laid down by the Institution are adhered to in the manufacture of the National Flags.

Yours faithfully,

D.S.(F)

No. 41/3/49-Public Dated 11 July 1951

12/7

Copy, with a copy of the publication and the Press note referred to, is forwarded to Part C and D States for information and necessary action. Additional copies of the publication may, if required, be obtained on payment from the Institution direct.

12/7

Copy without enclosures forwarded to all Ministries for information.

By Order,

S. 5 (Large).
MFP—26 S&P—6767—(M-28)—21-7-49—1,50,000 Pads.

No. A/ 69- 9/51 S. No. 56 (284)

190

From

The Secretary to the Regional Commissioner
and Adviser, Saurashtra, Rajkot.

To

The Deputy Secretary to the Government of India,
Ministry of Home Affairs, New Delhi.

D.4848/51-Public
31-7-51

6407-P

REGIONAL SECRETARIAT,
Rajkot, the 26th July, 1951.

Sub:- National Flag of India - Indian Standard specification for (cotton Khadi).

-=-=-=-

Sir,

P189 Corr

I am directed to refer to your No. 41/3/49-Public, dated the 11th July, 1951, addressed to all Part A and B States (copy of which was received with Ministry of States' letter No. F.32(19)-PB/51, dated the 18th July, 1951) and to request that a copy of the pamphlet entitled 'Indian Standard Specification for the National Flag of India (Cotton Khadi)' published by the Indian Standards Institution, Delhi, together with a copy of Press Note may please be supplied to this office as the same does not appear to have been received in this office.

(Public Section)

A draft is put up.

Yours faithfully,

(A. S. Fanse).
Secretary to the Regional Commissioner.

DFA
PS
Psh
1-8-51

Upp/25.

PSA

Sr No 67

(91)

(235)

MHA

~~DEPARTMENT~~/OFFICE,

File No.
Serial No.

RECEIVED IN THE R. & I. (A)
On
1. Date of despatch. 3/8
2. List of enclosures. Nl.
Typed by
Compared by

Draft Letter ~~Memorandum~~ ~~Telegram~~

No. 41/3/49-Pub Dated 3rd Aug. '51

180

To,
The Secretary to the Regional Commissioner & Adviser,
Saurashtra, Rajkot

Subject. – National Flag of India – Indian Standard Specification for (cotton Khadi)

3/8

Sir,

With reference to your letter No. A/69-9/51 dated the 26th July 1951 on the subject mentioned above, I am directed

H/P-190 Cw

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to send herewith, as desired, a copy of Press Note. As regards the ~~C~~ pamphlet, you may obtain it direct from the Asstt Secy (Administration) Indian Standards Institution, on payment, as this Ministry have no spare copies.

Yours faithfully

for
US (Ch)

with reference to
your letter No. A/69-9/51
dated the 26th July 1951
on the subject mentioned

PP. 187-88 Cor.

Int.

R.O.

Also make 5 spare copies of the Press Note for Sech

S-5 (Small).
MFP—305 S&P—6767-A—(M-409)—13-12-48—150,000 Pads.

Sr No 68

(287)

193

D.4874/51-Public
1-8-51

4556/A

PUBLIC(POLITICAL-B)DEPARTMENT
(No.431/50-11)

From
Sri K.Ramunni Menon, I.C.S.,
Chief Secretary to the Government of Madras.

To
The Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI.

Dated, Fort St.George, the 28th July 1951.

Sir,

Sub: Flags - National flag - Manufacture - Material, size etc.

Ref: Letter from the Government of India, Ministry of Home Affairs, No.41/3/49-Public dated 11-7-51.
----- P. 189 corr

I am directed to state that a copy of the pamphlet entitled 'INDIAN STANDARD SPECIFICATION FOR THE NATIONAL FLAG OF INDIA (COTTON KHADI)' stated to have been supplied to the State Government direct by the Indian Standards Institution, Delhi, has not been received by this Government so far. I am therefore directed to request that a copy of the pamphlet may be sent to this Government at an early date.

I am also to invite in this connection a reference to this Government's correspondence resting with your letter No.D.4001/51-Public

M. P.S
31/7

p.t.o.

288

194

dated 5-7-51 on the above subject and to enquire whether the Ministry of Home Affairs' letter under reference should be taken as the reply to this Government's letter No.3495/49-4, Public(Miscellaneous) dated 7-10-49 or whether any further communication in the matter is to be expected.

Yours faithfully,

28.7.51

For Chief Secretary to Government.

28/7/51

AS/28.7.

Sr No. 69

287

195

D.4894/51 Public
1-8-51

GOVERNMENT OF ORISSA
Home Department.

No. 9373 Poll/-

8-A

From

Mr. E.B.Samuel.,
Under Secretary to Government.

To

The Deputy Secretary to the
Government of India, Ministry
of Home Affairs, New Delhi.

Cuttack, the 28th July, 1951.

Subject:- Indian Standard Specification for National Flag of India (Cotton Khadi).

Sir,

P 189 Corr

With reference to your letter No. 41/3/49-Public., dated the 11th July, 1951, on the above subject, I am directed to request you to send a copy of pamphlet entitled, "Indian Standard Specification for National Flag of India (Cotton Khadi)" as the same does not appear to have been received in this Department from the Indian Standard Institution, Delhi direct.

Yours faithfully,

E.B.Samuel

Under Secretary to Government.

Choudhury 27/7

Sr No. 70

(288)

186

666-A

No.F.32(19)-PB/51.
Government of India.
Ministry of States.

D. 4P746/51 [illegible]
[illegible]

Dated New Delhi-2, the 3 August 1951.

OFFICE MEMORANDUM.

Sub:-Indian Standard Specification for National Flag of India (Cotton Khadi).

.....

The undersigned is directed to enclose a copy of the papers cited in the margin and to request that three copies of the Pamphlet and the Press Note issued by the Indian Standards Institution, Delhi, may kindly be supplied direct to the Adviser to His Excellency the Governor of Assam, Under intimation to this Ministry.

1. Ministry of States letter to Regional Commissioners and Adviser to His Excellency the Governor of Assam, No.F.32(19)-PB/51, dated 18th July 1951.
2. Letter from Adviser to His Excellency the Governor of Assam, No.S/Misc/5/51/III, dated 27th July 1951.

CGanesan

Deputy Secretary
to the Government of India.

MPS
618

The Ministry of Home Affairs.

288A

197

Copy of letter No.F.32(19)-PB/51, dated the 18th July 1951, from the Deputy Secretary to the Government of India, Ministry of States, to the All Regional Commissioners and Advisers, etc.

....

Sub:- Indian Standard Specification
for National Flag of India
(Cotton Khadi).

......

I am directed to forward for information a copy of letter, addressed to States, No.41/3/49-Public, dated 11.7.51, from the Ministry of Home Affairs, Government of India, New Delhi.

....

Copy of letter No.41/3/49-Public, dated the 11th July 1951, from the Deputy Secretary to the Government of India, Ministry of Home Affairs, to the Part A & B States.

....

Sub:- National Flag of India-
Indian Standard Specification
for (Cotton Khadi).

......

It is understood that copies of the pamphlet entitled "Indian Standard Specification for the National Flag of India (Cotton Khadi)" which has recently been published by the Indian Standards Institution, Delhi, and which contain full details regarding quality of the cloth and other particulars required for the manufacture of flags have been supplied to the State Government direct by the Institution. A copy of the press note issued by the Institution in this connection is also enclosed. It is requested that the matter may be given the widest possible publicity and steps taken to ensure that the standards laid down by the Institution are adhered to in the manufacture of the National Flags.

....

Copy of letter No.S/Misc/5/51/III, dated the 27th July 1951, from the Assistant to the Adviser to the Governor of Assam, to the Deputy Secretary to the Government of India, Ministry of States.

......

Sub:- Indian Standard Specification for
National Flag of India (Cotton Khadi).

Ref:- Your letter No.F.32(19)-PB/51
dated the 18th July 1951.

....

I am directed to invite a reference to your letter quoted above and to request you to be so good as to cause this Secretariat kindly furnished with three copies of the pamphlet and the Press Note issued by the Indian Standards Institution, Delhi on the subject.

....

Sr. No. 71 10758 (259) 1/8

GOVERNMENT OF JAMMU AND KASHMIR.

PRIME MINISTER'S SECRETARIAT
(EXTERNAL AFFAIRS DEPARTMENT).

D.5014/9-Public
7-8-9

To

The Deputy Secretary to the Govt. of India,
Ministry of Home Affairs,
New Delhi.

US (Pb)
Pub.
6/8.

No: A.431/51-EA dated Srinagar, the 3 August 1951.

Subject:- National Flag of India- Indian Standard specification for(Cotton Khadi).

--

p. 189 Corr

SIR,

I am directed to refer to your letter No:41/3/49-Public dated 11th July 1951 and request for a copy of the pamphlet entitled "Indian Standard Specification for National Flag of India(Cotton Khadi)".

Yours faithfully,

Raja Ram Sharma
(Raja Ram Sharma)
Under Secretary to Government
Ministry of External Affairs.

'Razdan'
2.8.

Sr. No. 72

(290)

129

M. H. A.

~~DEPARTMENT/OFFICE.~~

File No.
Serial No.

1103

(2)

D.O. Letter
Draft ~~Memorandum~~
~~Telegram~~

No. 41/3/49-Public Dated 16.8.51

1. Date of despatch
2. List of enclosures
Case No.
Typed by
Compared by

RECEIVED IN THE R. & I. (A)
13/8

Mr. M.R.

P.S

16/8

To

Dr. Lal. C. Verman,
Director, Indian Standards Institution
19, University Road,
Civil Lines, Delhi-8

Subject:- National Flag of India - Indian Standard Specifications for (Cotton khadi) -

Dear Dr. Verman,

As you may recollect, we were told that the Indian Standard Institution had supplied a copy of the pamphlet 'Indian Standard Specifications for the National Flag of India (cotton khadi)' to all the Part 'A' & 'B' States, as they were said to contribute to the upkeep of the Institution

O.T.O.

291

200

in some way or other. We accordingly drew the attention of all the State Govts to this fact & asked them to give the widest possible publicity in the matter and to ensure that the standards laid down by the Institution are adhered to in the manufacture of the National Flag.

P 189 Corr

2.1

2. The Govts. of Madras, Orissa & Jammu & Kashmir have told us that they have not received any copy of your pamphlet. Will you please suggest what reply we should send to these State Govts?

PP. 194-5 & 198 Corr

3. This has reference to our telephonic talk of the 9th instant.

Yours Sincerely

U.S. (P6)

Se No 73

20/

MHA
~~DEPARTMENT/OFFICE~~.

File No.
Serial No.

Draft ~~Letter~~ Memorandum ~~Telegram~~

No. 41/3/49-Public Dated 16.8.51

1. Date of despatch.
2. List of enclosures.

Issue
13/8

ISSUED R & I (A)
On 16/8
Initial

To,

The Ministry of States.

Subject:- National Flag of India- Indian Standard Specification for (Cotton Khadi) —

With reference to the Ministry of States O.M. No. F.32(19)-PB/51 dt. 3.8.51 on the subject mentioned above, the undersigned is directed to send herewith a copy of the Press Note. As regards the pamphlet, it may be obtained direct from the Secretary, (Administration)

P. 196
Cur

P.T.O.

293

202

Indian Standards Institution,
19 University Road, Civil
Lines, Delhi-8, as this
Ministry have no
spare copies.

or

U.S. (Pb)

S.5 (Small).
MFP—305 S&P—6767-A—(M-400)—18-12-48—150,000 Pads.

(294)

Sr. No. 74

✓ ~~D~~/5423/51 Pl
21/8

203

INDIAN STANDARDS INSTITUTION

Member, International Organization for Standardization (ISO)

Grams : Indstand
Delhi
Phones : 6105
~~5419~~
19 University Road
Civil Lines
Delhi 8, India

ISI

Your Ref: D.O.No.41/3/49-Public.

PP199-205/an

Our Ref: IS:1

18 August 1951.

Subject: IS:1-1951 INDIAN STANDARD SPECIFICATIONS FOR NATIONAL FLAG OF INDIA (COTTON KHADI).

Dear Mr. Raman,

Kindly refer to your letter of 16th August cited above. The Madras, Orissa and Jammu & Kashmir Governments in their capacity as Sustaining Members of the ISI have appointed the following officers respectively, to act as their representatives for the purpose of their Sustaining Membership:

1) Shri M.T. Raju, I.C.S.,
   Director of Industries & Commerce,
   Government of Madras,
   P.O. Triplicane, Madras.

2) The Director of Agriculture,
   Government of Orissa,
   Cuttack.

3) The Director of Industries & Commerce,
   Government of Jammu and Kashmir,
   Srinagar.

OV
[illegible]/51

[illegible]

2. According to the general procedure of the ISI, these officers are sent [redacted] copies of [redacted] all ISI publications, including Standards. They, therefore, would have naturally received a copy of IS:1-1951 Indian Standard Specifications for National Flag of India (Cotton Khadi). I would suggest that in the first instance, you draw the attention of these Governments to make enquiries from these officers, whether they have received this copy or not. If they have not, we shall be glad to issue new copies to them.

Yours sincerely,

Lal C Verman

(Lal C. Verman).

M. P.S.
29
2/[illegible]

A.V. Raman, Esq.,
Deputy Secretary to the Government of India,
Ministry of Home Affairs,
NEW DELHI 2.

VSM.

Sr. No. 75

(295)

204

MHA

~~DEPARTMENT/OFF~~ICE.

File No.
Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

1. Date of despatch. 8/9
2. List of enclosures.

Issued
31/8
RCD

No. 41/3/49. Pub Dated 30.8.51

To, The Chief Secy. to the Govt. of Madras,
Public (Political - B). Deptt.
Fort St. George.
Madras.

Subject:- National Flag of India - Manufacture - Nature size etc. —

30/8

H- 193-4
Cerr

Sir,

1 With reference to your letter No. 431/50-11 dt. 28.7.51 on the subject mentioned above, I am directed to say that the Govt of Madras, in their capacity as Sustaining Members of the Indian Standards Institution, have appointed Shri M.T. Raju I.C.S., Director of Industries & Commerce, Govt. of Madras, to act as their representative for the purpose of their Sustaining Membership.

(296) 203

According to the general procedure of the Institution, he has been furnished with a copy of the pamphlet in question. I am therefore to suggest that he may be contacted in the matter.

2. As regards the question of Central Source of manufacture of National flags & consequent its supply to the State Govts., I am to say ~~in form~~ that a further communication will follow, when a final decision has been reached.

Yours faithfully
sd/-
Us (Ph)

S-5 (Small).
MFP—305 S&P—6767-A—(M-409)—13-12-48—150,000 Pads.

Sr No 76

(297) ~~206~~

MHA.

~~DEPARTMENT/OFFICE.~~

File No.
Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

1. Date of despatch
2. List of enclosures

Issue

No. 41/3/49-Public Dated 30.8.51

To,
The Chief Secy. to the Govt. of Orissa,
Home Deptt.,
Cuttack.

Subject:- National Flag of India - Indian Standard Specifications for (Cotton Khadi ——

Sir,

With reference to your letter No. 9373 Poll dated the 28th July 1951 on the subject mentioned above, I am directed to say that the Govt. of Orissa in their capacity as Sustaining Members of the Indian Standards Institution have appointed the Director of Agriculture Govt. of Orissa, to act as their representative for the purpose of their Sustaining Membership. According to the general procedure of ---

30/8

(298) 207

of the Institution, the Director of Agriculture has been furnished with a copy of the pamphlet "Indian Standard Specification for National Flag of India (Cotton Khadi)." I am, therefore, to suggest that the Director of Agriculture may be contacted in the matter.

Yours faithfully,

sd

USC(Ph)

S.5 (Small).
MFP—305 S&P—6767-A—(M-409)—13-12-48—150,000 Pads.

Sr No 77 MHA 208 (299)

~~DEPARTMENT~~/OFFICE.

File No.
Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

1. Date of despatch.
2. List of enclosures.

(3) 2529

RECEIVED IN THE R. & I. (A)
On............
Case No. GS
Typed by............
Compared by............

No. 41/3/49-Public Dated 30.8.51

To, The Chief Secy. to the Government of
Jammu & Kashmir,
~~Public~~ External Affairs Deptt.
Srinagar

Subject:- National flag of India - Indian Standard Specifications for (cotton Khadi).—

Sir,

With reference to your letter No. A. 431/51-EA dated the 3rd August 1951 on the subject mentioned above, I am directed to say that the Govt. of Jammu & Kashmir in their capacity as Sustaining Members of the Indian Standards Institution have appointed the Director of Industries & Commerce Govt. of J&K, to act as their representative for the purpose of their Sustaining Membership. According to the general procedure of the Institution, he has been furnished with a copy of the pamphlet "Indian Standard Specification for National Flag of India (Cotton Khadi)". I am therefore to suggest that the Director of Industries & Commerce may be contacted in the matter.

Yours faithfully

US (Ph)

S-5 (Small).
MFP—305 S&P—6767-A—(M-404)—18-12-48—150,000 Pads.

Sr. No. 78

210
Comp.
[illegible]
20/9
[illegible]

(301)

MUNICIPAL BOARD, BIKANER.

No. 9/1594 of 1951. Dated 17-9-1951

D.6183/51 [illegible]
20-9-51

From
The Executive Officer,
Municipal Board,
Bikaner.

To
Sardar Fatehsingh,
Deputy Secretary to the Govt. of India,
New Delhi.

No. of
Enc,

~~Sir,~~

Sub: National Flag of India-Indian Standard specification for (Cotton Khadi)

&

P189/Cwr

Ref: Your circular letter No.41/3/49-Public dated 11th July, 1951.

PSA
20/9

A copy of the pamphlet entitled "Indian Standard Specification for the National Flag of India (Cotton-Khadi) may please be sent to this office at an early date.

17.9.51

GLP.
17.9.51.

Executive Officer,
Municipal Board, Bikaner.

17/9/51.

See Man Flt
MHA Sr. No. 79

211

302

DEPARTMENT/OFFICE.

File No.
Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

No. 41/3/49-Public

Dated 24.9.51

1. Date of despatch.
2. List of enclosures.

Issue (F.C.) 22/9

V.M. 24/9

1902

ISSUED
Initial
R & I

24/9

To,

The Executive Engineer,
Municipal Board,
Bikaner

Sub:- National Flag of India – Indian Standard Specification for (Cotton Khadi) —

Sir,

With reference to your letter No. G/1594 dated the 17th Sept. '51 on the subject mentioned above, I am directed to say that the pamphlet entitled "Indian Standard Specification for the National Flag of India (Cotton Khadi)" may be obtained direct, on payment, from the Secretary (Administration), Indian Standard Institution, 19 University Road, Civil Lines, Delhi - 8, as this Ministry have no spare copies.

Yours faithfully,

US (Pu)

S-5 (Small).
MFP—305 S&P—6767-A—(M-400)—13-12-48—150,000 Pads.